

GenCore version 5.1.9
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OM nucleic - nucleic search, using sw model

Run on: November 7, 2006, 10:27:52 ; Search time 69 Seconds
(without alignments)
2.795 Million cell updates/sec

Title: US-10-764-316-6-COPY
Perfect score: 2743
Sequence: 1 9cgggcccgtatccattgt.....aaaaaaaaaaaaaaaaaaaaa 2743

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 1598 seqs, 35149 residues

Total number of hits satisfying chosen parameters: 3196

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1600 summaries

Database : ngsdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60	2.2	60	1	ABN59221 Human spliced tran
2	60	2.2	60	1	ABN59222 Human spliced tran
3	60	2.2	60	1	ABN59220 Human spliced tran
4	60	2.2	60	1	ABN33255 Human spliced tran
5	60	2.2	60	1	ABN59048 Human spliced tran
6	54	2.0	54	1	ADC22315 Nuclear localisati
7	50	1.8	50	1	ABZ06784 Human leukocyte ge
8	50	1.8	50	1	ABZ06394 Human leukocyte ge
9	49.4	1.8	51	1	ADC17041 Human single nucle
10	49.4	1.8	51	1	ADC17040 Human single nucle
11	48.4	1.8	50	1	ABZ00091 Human leukocyte ge
12	48.4	1.8	50	1	ABZ02139 Human leukocyte ge
13	48.4	1.8	50	1	ABZ00089 Human leukocyte ge
14	35	1.3	35	1	ADL33738 LNA capture probe
15	35	1.3	35	1	AEA16041 Cy3-labeled polynu
16	35	1.3	35	1	ABE86826 Novel solid phase-
17	35	1.3	35	1	AEF94731 Optical DNA analys
18	35	1.3	38	1	AAZ57404 Hepatitis C virus
19	35	1.3	39	1	ADN35261 Probe sequence use
20	35	1.3	40	1	AAQ35031 Oligonucleotide sp
21	35	1.3	40	1	AAQ39649 Primer used in con
22	35	1.3	40	1	ADH56159 Oligonucleotide pr
23	35	1.3	40	1	ADH76858 Probe related to t
24	35	1.3	40	1	ADK70561 Nucleic acid sequ
25	35	1.3	40	1	ADK67293 RNA sequence targ
26	35	1.3	40	1	ADK67292 DNA probe used for
27	35	1.3	40	1	ADJ71299 Method of analysi
28	35	1.3	40	1	ADL71382 Labelled DNA oligo
29	35	1.3	40	1	ADL71383 Labelled DNA oligo
30	35	1.3	40	1	ADL78812 Labelled DNA oligo
31	35	1.3	40	1	ADM16960 Probe immobilised
32	35	1.3	40	1	ADN35256 Probe sequence use
33	35	1.3	40	1	ADN35263 Probe sequence use

34	35	1.3	40	1	ADN35257 Target sequence of
35	35	1.3	40	1	ADN35264 Probe sequence use
36	35	1.3	40	1	ADN35265 Target sequence of
37	35	1.3	40	1	AED51679 Modified nucleic a
38	35	1.3	40	1	AED51678 Modified nucleic a
39	35	1.3	40	1	AED68744 4mer poly-A detec
40	35	1.3	40	1	AEF24436 4mer poly A DNA s
41	35	1.3	40	1	AEF05826 PolyA target sequ
42	35	1.3	41	1	ADN35262 Probe sequence use
43	35	1.3	41	1	ADO41099 Human cDNA probe u
44	35	1.3	43	1	AAD17216 Human mRNA hybridi
45	34	1.2	34	1	AEA32851 NS5B genotype 2b R
46	34	1.2	34	1	AEH86391 Reverse primer use
47	34	1.2	36	1	ABK99272 Hepatitis C virus
48	34	1.2	36	1	AAD27116 RNA template, AA u
49	34	1.2	38	1	AAL07487 Human reproductive
50	33.6	1.2	40	1	AAD041321 Human cDNA probe u
51	33.2	1.2	40	1	ABN89412 Polymorphism detec
52	33	1.2	33	1	AAF29153 PCR primer SEQ ID
53	33	1.2	33	1	ADS19106 Multisignal labeli
54	33	1.2	36	1	ABK99273 Hepatitis C virus
55	33	1.2	36	1	AAD27117 RNA template, AU u
56	32.4	1.2	37	1	AAD27125 RNA template, (AU)
57	32	1.2	32	1	AAAN70278 Sequence of scissi
58	32	1.2	32	1	AAAN92244 SS probe MRCO68.
59	32	1.2	32	1	ADC33445 Template oligonuc
60	32	1.2	40	1	AAZ98722 PCR primer used fo
61	31.8	1.2	39	1	AAV12483 Oligonucleotide SE
62	31.8	1.2	39	1	AAV12483 Oligonucleotide SE
63	31.2	1.1	39	1	AD132816 Multimer SEQ ID NO
64	31	1.1	31	1	AAI30705 3' flanking RNA of
65	31	1.1	31	1	AEH86835 Human single nucle
66	31	1.1	31	1	AEH86830 Novel solid phase-
67	31	1.1	31	1	AEH86829 Novel solid phase-
68	31	1.1	31	1	AEH86846 Novel solid phase-
69	31	1.1	31	1	AEH86851 Novel solid phase-
70	31	1.1	31	1	AEH86845 Novel solid phase-
71	31	1.1	31	1	AEF12155 Oligonucleotide Cy
72	31	1.1	31	1	AEF94772 Optical DNA analys
73	31	1.1	31	1	AEF94773 Optical DNA analys
74	31	1.1	31	1	AEF94778 Optical DNA analys
75	31	1.1	31	1	AEF94756 Optical DNA analys
76	31	1.1	31	1	AEF94757 Optical DNA analys
77	31	1.1	31	1	AEF94762 Optical DNA analys
78	31	1.1	31	1	AEF94718 Optical DNA analys
79	31	1.1	31	1	AEF94723 Optical DNA analys
80	31	1.1	31	1	AEF94717 Optical DNA analys
81	31	1.1	33	1	ADU05084 Homopolymer tail w
82	31	1.1	33	1	ADU83547 Trichomonas vagina
83	31	1.1	33	1	ADV91960 Prostata cancer sp
84	30.8	1.1	34	1	AAT91827 Antitumoural phosph
85	30.8	1.1	37	1	AAAD27124 RNA template, (AU)
86	30.6	1.1	31	1	AAA79196 Human genomic DNA
87	30.6	1.1	31	1	AAA79197 Human genomic DNA
88	30.6	1.1	31	1	AAA79195 Human genomic DNA
89	30.6	1.1	31	1	AAA79199 Human genomic DNA
90	30.6	1.1	31	1	AAA79193 Human genomic DNA
91	30.6	1.1	31	1	AAA79198 Human genomic DNA
92	30.6	1.1	31	1	AAA79194 Human genomic DNA
93	30.6	1.1	31	1	ACD43584 Human gene single
94	30.4	1.1	32	1	ACF04897 Human beta-actin g
95	30.2	1.1	31	1	AAI17761 Oligo d(T) PCR pri
96	30.2	1.1	31	1	AEH64867 cDNA first strand
97	30.2	1.1	32	1	AAAS09500 SMART PCR primer #
98	30.2	1.1	32	1	ABA01204 Mamushi fibrinolyt
99	30	1.1	30	1	AAAN70277 Sequence of scissi
100	30	1.1	30	1	AAAN92243 SS probe MRCO64.
101	30	1.1	30	1	AAQ36302 GSTJanti, for GSTp
102	30	1.1	30	1	AAQ36301 GSTJpar, for GSTpi
103	30	1.1	30	1	AAQ36301 WO9923258 oligonuc
104	30	1.1	30	1	AAQ36301 Immunostimulatory
105	30	1.1	30	1	AAQ36301 Immunostimulatory
106	30	1.1	30	1	ABK10416 Synthetic primer s

C 107	30	1.1	30	1	ABK10412	Synthetic primer s	C 180	26	0.9	26	1	ABZ24784	Oligodeoxynucleic
C 108	30	1.1	30	1	ABK70490	In-situ analysis s	C 181	26	0.9	26	1	ABX93599	Human zsig63 PCR/s
C 109	30	1.1	30	1	ABK53961	Method of measurin	C 182	26	0.9	26	1	ACA62282	Oligo (dT) primer
C 110	30	1.1	30	1	ADU07154	Oligonucleotide #2	C 183	26	0.9	26	1	ADH44608	Human cDNA encodin
C 111	30	1.1	30	1	ADV98265	Microarray associa	C 184	26	0.9	26	1	ADI00944	Sequencing primer
C 112	30	1.1	30	1	AED67969	Staphylococcus aur	C 185	26	0.9	26	1	ADO47862	Gene expression in
C 113	30	1.1	30	1	AED67958	Methicillin resist	C 186	26	0.9	26	1	ADP19767	Human zalphall lig
C 114	30	1.1	30	1	AE866839	Novel solid phase-	C 187	26	0.9	26	1	AQ080457	Da(26) biotin prim
C 115	30	1.1	30	1	AE866831	Novel solid phase-	C 188	26	0.9	26	1	ADV96391	Human zalphall lig
C 116	30	1.1	30	1	AE866833	Novel solid phase-	C 189	26	0.9	26	1	ADY96857	Human zsig63 cDNA
C 117	30	1.1	30	1	AE866839	Novel solid phase-	C 190	26	0.9	26	1	AE86842	Novel solid phase-
C 118	30	1.1	30	1	AE866855	Novel solid phase-	C 191	26	0.9	26	1	AE86828	Novel solid phase-
C 119	30	1.1	30	1	AE866847	Novel solid phase-	C 192	26	0.9	26	1	AE86844	Novel solid phase-
C 120	30	1.1	30	1	AEF12156	Oligonucleotide dT	C 193	26	0.9	26	1	AE86858	Oligonucleotide dA
C 121	30	1.1	30	1	AEF94776	Optical DNA analys	C 194	26	0.9	26	1	AEF12154	Optical DNA analys
C 122	30	1.1	30	1	AEF94774	Optical DNA analys	C 195	26	0.9	26	1	AEF94771	Optical DNA analys
C 123	30	1.1	30	1	AEF94782	Optical DNA analys	C 196	26	0.9	26	1	AEF94785	Optical DNA analys
C 124	30	1.1	30	1	AEF94758	Optical DNA analys	C 197	26	0.9	26	1	AEF94769	Optical DNA analys
C 125	30	1.1	30	1	AEF94760	Optical DNA analys	C 198	26	0.9	26	1	AEF94755	Optical DNA analys
C 126	30	1.1	30	1	AEF94766	Optical DNA analys	C 199	26	0.9	26	1	AEF94730	Optical DNA analys
C 127	30	1.1	30	1	AEF94719	Optical DNA analys	C 200	26	0.9	26	1	AEF94716	Optical DNA analys
C 128	30	1.1	30	1	AEF94721	Optical DNA analys	C 201	26	0.9	26	1	AAV71935	Anchored poly T RT
C 129	30	1.1	30	1	AEF94727	Optical DNA analys	C 202	25.8	0.9	29	1	AAV59216	Linear multimer pr
C 130	30	1.1	33	1	AAK88521	Optical DNA analys	C 203	25.8	0.9	29	1	ADC65873	DNA oligonucleotid
C 131	30	1.1	35	1	ADL33740	Conus stercusmusca	C 204	25.8	0.9	29	1	AD081065	Cow prion protein
C 132	29	1.1	29	1	AAQ05003	LNA capture probe	C 205	25.8	0.9	29	1	AD081069	Cow prion protein
C 133	29	1.1	29	1	AD081147	Sequence binding t	C 206	25.8	0.9	30	1	AAQ83940	Oligonucleotide cl
C 134	29	1.1	29	1	ADS19107	Prion protein poly	C 207	25.8	0.9	30	1	AAF60462	Oligonucleotide cl
C 135	29	1.1	29	1	ADU07155	Multisignal labeli	C 208	25.8	0.9	30	1	ADA26181	Rice semi-dwarf (s
C 136	28.8	1.0	33	1	ADH70631	3'-amino oligonucl	C 209	25.6	0.9	32	1	AAQ87894	Normalised library
C 137	27.2	1.0	33	1	ABQ80395	Human Vbeta gene r	C 210	25.4	0.9	27	1	ABX79828	EST polymorphic DN
C 138	27.2	1.0	33	1	ADK44838	Probe APC 1-MUT.	C 211	25.4	0.9	27	1	ADG83852	Primer for cDNA sy
C 139	27.2	1.0	33	1	AED67931	Gold nanoparticle	C 212	25.2	0.9	26	1	AAK3852	Human zsig63 cDNA
C 140	27	1.0	27	1	AAK70281	Human mutant APC 1	C 213	25.2	0.9	26	1	AAK3852	Human secreted sal
C 141	27	1.0	27	1	AAK70274	Sequence of scissi	C 214	25.2	0.9	26	1	AAK45054	ZC7231 primer used
C 142	27	1.0	27	1	AAK92240	Sequence of scissi	C 215	25.2	0.9	26	1	AAK93598	Human zsig63 PCR/s
C 143	27	1.0	27	1	AAK92247	SS probe MRCO46.	C 216	25.2	0.9	26	1	ACF36382	Nucleotide sequenc
C 144	27	1.0	27	1	AAQ40854	SS probe MRCO71.	C 217	25.2	0.9	26	1	ADY56592	Bovine viral diarr
C 145	27	1.0	27	1	AAK99706	DNA sequence used	C 218	25.2	0.9	26	1	ADY96856	Human zsig63 cDNA
C 146	27	1.0	27	1	ABK78427	Immunostimulatory	C 219	25.2	0.9	27	1	ABQ76254	Tea tree tubulin o
C 147	27	1.0	27	1	ABL39406	Angiogenesis inhib	C 220	25.2	0.9	27	1	AAQ95960	Oligonucleotide bi
C 148	27	1.0	27	1	ABK66592	Immunostimulatory	C 221	25	0.9	25	1	AAK84259	PCR primer for hum
C 149	27	1.0	27	1	ACH03245	Human gene specifi	C 222	25	0.9	25	1	AAK39306	Rapid capture prob
C 150	27	1.0	27	1	ADK37208	Immunostimulatory	C 223	25	0.9	25	1	AAK30267	Capture probe Cpl2
C 151	27	1.0	27	1	ADU90227	Immunostimulatory	C 224	25	0.9	25	1	ABK49986	Example oligonucle
C 152	27	1.0	27	1	AED75671	Allergic response	C 225	25	0.9	25	1	ABK49986	Oligonucleotide of
C 153	27	1.0	27	1	AAV15487	Immunostimulatory	C 226	25	0.9	25	1	ADC54008	Oligonucleotide of
C 154	27	1.0	29	1	AAK43315	PR-1 promoter prim	C 227	25	0.9	25	1	ADF39737	Oligonucleotide of
C 155	27	1.0	29	1	AAK00066	RNA-protein fusion	C 228	25	0.9	25	1	ADF39737	Target DNA sequenc
C 156	27	1.0	29	1	AAK00066	Synthetic branched	C 229	25	0.9	25	1	ADF39736	Prior protein poly
C 157	27	1.0	29	1	AAK20990	C-myc epitope puro	C 230	25	0.9	25	1	AD081145	Fluorophore-label
C 158	27	1.0	29	1	AAK98637	S cerevisiae alpha	C 231	25	0.9	25	1	ADV86469	Fluorophore-label
C 159	27	1.0	30	1	AAV48087	Oligonucleotide 30	C 232	25	0.9	25	1	ADV86468	Fluorophore-label
C 160	27	1.0	30	1	ADY75117	Nucleic acid const	C 233	25	0.9	25	1	AE826392	DNA hybridization
C 161	27	1.0	32	1	ABN83375	Mononucleotide rep	C 234	25	0.9	25	1	AE826391	Fluorescently-labe
C 162	27	1.0	32	1	ADH35222	Probe #1 of the in	C 235	25	0.9	26	1	AAK07466	Human BS124 specifi
C 163	26.8	1.0	30	1	ABL35101	Phosphorothioate s	C 236	25	0.9	26	1	AAK78723	Human pancreatic p
C 164	26.6	1.0	27	1	AAK43904	M. tuberculosis rp	C 237	25	0.9	26	1	AAK78723	Human zalphall lig
C 165	26.2	1.0	27	1	ABX12469	Coxsackie B virus	C 238	25	0.9	26	1	ABX93461	LS147-specific pol
C 166	26.2	1.0	31	1	AD081070	Cow prion protein	C 239	25	0.9	26	1	ADH44609	Human cDNA encodin
C 167	26	0.9	26	1	AAK70276	Sequence of scissi	C 240	25	0.9	26	1	ADI00945	Sequencing primer
C 168	26	0.9	26	1	AAK70275	Sequence of scissi	C 241	25	0.9	26	1	ADP19768	Human zalphall lig
C 169	26	0.9	26	1	AAK92241	SS probe MRCO59.	C 242	25	0.9	26	1	ADV96392	Universal primer S
C 170	26	0.9	26	1	AAK92242	SS probe MRCO60.	C 243	25	0.9	26	1	ADW14179	Nucleotide sequenc
C 171	26	0.9	26	1	AAK77536	CDNA library produ	C 244	25	0.9	26	1	AEK01876	Anchored poly T RT
C 172	26	0.9	26	1	AAK73526	Human full length	C 245	25	0.9	27	1	AAV71936	Human androgen rec
C 173	26	0.9	26	1	AAK20596	Primer #4. Uniden	C 246	25	0.9	27	1	ABK53863	Human ARCAP associ
C 174	26	0.9	26	1	ABK52638	Human zsig63 cDNA	C 247	25	0.9	27	1	ABK53863	Human ARCAP associ
C 175	26	0.9	26	1	ABK52638	Human secreted sal	C 248	25	0.9	27	1	ABK53863	RT-PCR primer olig
C 176	26	0.9	26	1	ABK66591	Human gene specifi	C 249	25	0.9	27	1	ADG75349	Duo binding molety
C 177	26	0.9	26	1	AAK45055	ZC764a primer use	C 250	25	0.9	27	1	ADG75349	Duo binding molety
C 178	26	0.9	26	1	AAK20671	Human zalphall lig	C 251	25	0.9	29	1	ABN83378	Mononucleotide rep
C 179	26	0.9	26	1	AAK43853	Primer #2 used to	C 252	24.8	0.9	28	1	AD081068	Cow prion protein

C 253	24.2	0.9	26	1	ADO30495	5' RACE PCR primer	326	22.4	0.8	25	1	AA34264	Human CYP2D6 gene
C 254	24	0.9	24	1	AA9286	POLYA, a competitor	327	22.2	0.8	23	1	AA57030	Murine VE-PTP cDNA
C 255	24	0.9	24	1	AA31743	Nucleotide sequenc	328	22	0.8	22	1	AA64724	2',5'-linked tetra
C 256	24	0.9	24	1	AA04086	Oligonucleotide PO	329	22	0.8	22	1	AA71413	L1 cleavage site r
C 257	24	0.9	24	1	AA040359	pBluescriptSK+ pha	330	22	0.8	22	1	AD12348	L1 retrotransposon
C 258	24	0.9	24	1	AA40353	pBluescriptSK+ pha	331	22	0.8	22	1	AD25630	Junction-specific
C 259	24	0.9	24	1	AA99756	Immunostimulatory	332	22	0.8	22	1	AA30430	Oligomer IL6803 fo
C 260	24	0.9	24	1	AA99304	Immunostimulatory	333	22	0.8	23	1	AA30431	Oligomer IL6804 fo
C 261	24	0.9	24	1	AA99757	Immunostimulatory	334	22	0.8	23	1	AB101773	Human MSH2 (hMSH2)
C 262	24	0.9	24	1	ABV14842	Human prostate exp	335	22	0.8	24	1	ADY85941	RT-PCR primer used
C 263	24	0.9	24	1	AB578477	Angiogenesis inhib	336	22	0.8	26	1	AD12409	L1 retrotransposon
C 264	24	0.9	24	1	AB577949	Angiogenesis inhib	337	21.8	0.8	25	1	ABK86170	Oligo dT primer #3
C 265	24	0.9	24	1	AB578478	Angiogenesis inhib	338	21.8	0.8	25	1	AD081056	Cow prion protein
C 266	24	0.9	24	1	ABL39405	Immunostimulatory	339	21.8	0.8	25	1	AD081061	Cow prion protein
C 267	24	0.9	24	1	ABA98840	A24 oligonucleotid	340	21.8	0.8	26	1	AA16616	Gastric acid produ
C 268	24	0.9	24	1	AA517869	A24 oligonucleotid	341	21.4	0.8	23	1	AA16627	Gastric acid produ
C 269	24	0.9	24	1	ABK15639	RNA-PCR procedure	342	21.4	0.8	23	1	ADT55094	Electrophoresis ap
C 270	24	0.9	24	1	AB280181	Immunostimulatory	343	21.4	0.8	23	1	ADT55095	Electrophoresis ap
C 271	24	0.9	24	1	ACA62284	Oligo (dT)24 RT-PC	344	21.4	0.8	24	1	AA166361	Human phosphatidyl
C 272	24	0.9	24	1	ACD99729	Immunostimulatory	345	21.4	0.8	24	1	AA166361	Human phosphatidyl
C 273	24	0.9	24	1	ACH03285	Immunostimulatory	346	21.4	0.8	24	1	ADG16131	Compound activity
C 274	24	0.9	24	1	ACH03284	Immunostimulatory	347	21.4	0.8	24	1	ADG16127	Compound activity
C 275	24	0.9	24	1	ADA66379	mRNA poly A. Unid	348	21	0.8	21	1	AA075712	Reverse transcript
C 276	24	0.9	24	1	ADB37258	Immunostimulatory	349	21	0.8	21	1	AA26973	Primer used to rev
C 277	24	0.9	24	1	ADB36806	Immunostimulatory	350	21	0.8	21	1	AA244350	Protein kinase inh
C 278	24	0.9	24	1	ADB37259	Immunostimulatory	351	21	0.8	21	1	AA03631	Human ku autoantig
C 279	24	0.9	24	1	ADD31867	Butterfly biliverd	352	21	0.8	21	1	AAF99707	Immunostimulatory
C 280	24	0.9	24	1	ADE25524	Rolling circle amp	353	21	0.8	21	1	AAH42480	Oligonucleotide us
C 281	24	0.9	24	1	AAD26664	Immunostimulatory	354	21	0.8	21	1	AAH45788	Human KUAPP70 gene
C 282	24	0.9	24	1	ACA58802	Gastric ulcer trea	355	21	0.8	21	1	AB578428	Angiogenesis inhib
C 283	24	0.9	24	1	ADG75917	Non-CpG DNA oligo	356	21	0.8	21	1	ABL39404	Immunostimulatory
C 284	24	0.9	24	1	ADR48246	Microarray synthe	357	21	0.8	21	1	ACH03246	Regular oligo dT p
C 285	24	0.9	24	1	ADR48249	Microarray synthe	358	21	0.8	21	1	ACH03246	Immunostimulatory
C 286	24	0.9	24	1	ADU90278	Allergic response	359	21	0.8	21	1	ADB37209	Immunostimulatory
C 287	24	0.9	24	1	ADU90277	Allergic response	360	21	0.8	21	1	ADC24379	PCR primer for amp
C 288	24	0.9	24	1	ADU89749	Allergic response	361	21	0.8	21	1	ADK01344	Rat DNA microarray
C 289	24	0.9	24	1	ADV86472	Fluorophore-label	362	21	0.8	21	1	ADK01341	Rat DNA microarray
C 290	24	0.9	24	1	ADW99566	Rolling replicatio	363	21	0.8	21	1	ADK01330	Rat DNA microarray
C 291	24	0.9	24	1	AED75279	Immunostimulatory	364	21	0.8	21	1	ADK01288	Rat DNA microarray
C 292	24	0.9	24	1	AED75711	Immunostimulatory	365	21	0.8	21	1	ADM96310	Human AHP5F1 gene
C 293	24	0.9	24	1	AED75710	Immunostimulatory	366	21	0.8	21	1	ADJ88057	RT primer used in
C 294	24	0.9	24	1	AAV42215	Sequencing primer	367	21	0.8	21	1	ADM07216	Control primer use
C 295	24	0.9	25	1	AA342258	PCR primer for hum	368	21	0.8	21	1	ADU90228	Allergic response
C 296	24	0.9	25	1	AA342260	PCR primer for hum	369	21	0.8	21	1	ADV94812	Human glycosyltran
C 297	24	0.9	25	1	ACF79235	Calix(a)arene-olig	370	21	0.8	21	1	ADV86473	Fluorophore-label
C 298	24	0.9	25	1	AEA31163	Murine DNA oligonu	371	21	0.8	21	1	ADW71577	Oligonucleotide DS
C 299	24	0.9	25	1	AEA31164	Murine DNA oligonu	372	21	0.8	21	1	ADY26140	Varola DNA bindin
C 300	24	0.9	25	1	AEA31162	Murine DNA oligonu	373	21	0.8	21	1	ADZ98948	Human KU70 transcr
C 301	24	0.9	25	1	AEC33371	Oligonucleotide of	374	21	0.8	21	1	ADZ98946	Human KU70 transcr
C 302	24	0.9	28	1	AAA40358	pBluescriptSK+ pha	375	21	0.8	21	1	ADZ98950	Human KU70 transcr
C 303	24	0.9	28	1	AAA40362	pBluescriptSK+ pha	376	21	0.8	21	1	AED13306	Oligonucleotide #8
C 304	23.8	0.9	29	1	AAA57856	Deoxy-T22-tagged s	377	21	0.8	21	1	AEF40261	Immunostimulatory
C 305	23.8	0.9	29	1	AA144903	Triplex forming ol	378	21	0.8	21	1	AEF40261	Poly A DNA sequenc
C 306	23.4	0.9	26	1	AAV12482	Oligonucleotide SE	379	21	0.8	23	1	AAQ30432	Oligomer IL6805 fo
C 307	23.4	0.9	26	1	AAV59215	Circular template	380	21	0.8	23	1	AAA29753	Synthetic oligonuc
C 308	23.4	0.9	26	1	AA300018	Precircle DNA olig	381	21	0.8	24	1	ABK86169	Oligo dT primer #2
C 309	23.4	0.9	26	1	ADC65872	DNA oligonucleotid	382	21	0.8	24	1	ABK86168	Oligo dT primer #1
C 310	23.2	0.8	24	1	ABK48140	Aspergillus niger	383	21	0.8	26	1	AD26899	Bacterial PNP DNA
C 311	23.2	0.8	25	1	AEB90558	Thielavia terrestr	384	21	0.8	26	1	AD339650	PolyPNP out-of-fra
C 312	23.2	0.8	28	1	ADG76060	Non-CpG DNA oligon	385	21	0.8	26	1	ADX99080	Extend primer 57 u
C 313	23.2	0.8	28	1	ADG75972	Immunostimulatory	386	20.8	0.8	24	1	AAH24266	Human phosphatase
C 314	23	0.8	23	1	AAC62450	Cleavage of nuclei	387	20.8	0.8	24	1	AB155130	Human gonadotropin
C 315	23	0.8	23	1	AAC62451	Cleavage of nuclei	388	20.8	0.8	26	1	ADY03038	Extend primer 488
C 316	23	0.8	23	1	ADT55093	Electrophoresis ap	389	20.4	0.7	24	1	ADG75918	Immunostimulatory
C 317	23	0.8	23	1	ADT55098	Electrophoresis ap	390	20.4	0.7	25	1	AD233535	fragment of a plas
C 318	23	0.8	24	1	ADG16129	Compound activity	391	20.4	0.7	25	1	ADR44220	Caenorhabditis ele
C 319	23	0.8	24	1	ABF79809	EST polymorphic DN	392	20.2	0.7	22	1	AA150570	Molecular array pr
C 320	23	0.8	24	1	ADF12405	L1 retrotransposon	393	20.2	0.7	22	1	ACC48484	Locked nucleic aci
C 321	23	0.8	25	1	AAH38515	SNP specific SNPE	394	20.2	0.7	22	1	ACC48485	Locked nucleic aci
C 322	23	0.8	25	1	AAH38515	SNP specific SNPE	395	20.2	0.7	22	1	ACC48483	Locked nucleic aci
C 323	22.8	0.8	26	1	AA11744	Human haemoglobin	396	20.2	0.7	22	1	AA51324	Locked oligo dT
C 324	22.4	0.8	24	1	ADG16126	Antitumoural phosph	397	20.2	0.7	22	1	AB64451	Human RP-11-336A10
C 325	22.4	0.8	24	1	AED81269	Compound activity	398	20.2	0.7	22	1	ABX74887	Oligo-dT primer us

C 399	20.2	0.7	22	1	AD134007	RNA extraction anc	472	20	0.7	20	1	ACD27190	Nanotechnology nuc
C 400	20.2	0.7	22	1	AD197794	Oligonucleotide pr	473	20	0.7	20	1	ACD27060	Nanotechnology nuc
C 401	20.2	0.7	22	1	AD130395	Oligo dt PCR prime	474	20	0.7	20	1	ACH00064	Nanotechnology nuc
C 402	20.2	0.7	22	1	ADY03080	PCR primer to ampl	475	20	0.7	20	1	ACH00064	Immunostimulatory
C 403	20.2	0.7	23	1	ABK13916	3'-PCR primer used	C 476	20	0.7	20	1	ACD99851	Immunostimulatory
C 404	20.2	0.7	25	1	AC96256	HLA DPAl gene PCR	C 477	20	0.7	20	1	ACD99532	Immunostimulatory
C 405	20.2	0.7	25	1	ABA03917	Human connexin 9 p	478	20	0.7	20	1	ADA14838	Hairpin target seq
C 406	20.2	0.7	25	1	AD081067	Cow prion protein	479	20	0.7	20	1	ADA06159	Nanoparticle label
C 407	20.2	0.7	25	1	AD081060	Cow prion protein	480	20	0.7	20	1	ACD28995	Nanotechnology nuc
C 408	20.2	0.7	25	1	AD081060	Cow prion protein	481	20	0.7	20	1	ACD28995	Immunostimulatory
C 409	20	0.7	20	1	AAQ33554	Dye-coupled 3'-am	C 482	20	0.7	20	1	ADB36601	Immunostimulatory
C 410	20	0.7	20	1	AAQ33554	Microsatellite seq	C 483	20	0.7	20	1	ADB36929	Immunostimulatory
C 411	20	0.7	20	1	AAQ58578	Sequence of synthe	C 484	20	0.7	20	1	ADC24378	PCR primer for amp
C 412	20	0.7	20	1	AAQ94205	Alpha-anomeric oli	C 485	20	0.7	20	1	AD52461	Stem cell factor (
C 413	20	0.7	20	1	AAQ75577	Reverse transcript	486	20	0.7	20	1	ADP09421	Linking oligonucle
C 414	20	0.7	20	1	AAQ90405	T2 (synthetic DNA	487	20	0.7	20	1	ADP09421	Nanotechnology nuc
C 415	20	0.7	20	1	AAQ90405	Mammalian stem cel	488	20	0.7	20	1	ADP65590	Coadsorbed diluent
C 416	20	0.7	20	1	AAV07752	Phosphorothioate o	489	20	0.7	20	1	ADH59608	Nanotechnology nuc
C 417	20	0.7	20	1	AAV63649	Anti-HTLV antisens	C 490	20	0.7	20	1	ADH59620	Non-nucleotide pro
C 418	20	0.7	20	1	AAV34591	M. vaccae antigeni	491	20	0.7	20	1	ADH59620	Human oligonucleot
C 419	20	0.7	20	1	AAV34591	Oligonucleotide se	492	20	0.7	20	1	ADH59620	Human oligonucleot
C 420	20	0.7	20	1	AAV34591	Synthetic RNA sequ	493	20	0.7	20	1	ADH59620	Human oligonucleot
C 421	20	0.7	20	1	AAV34591	Mycobacterial 16S	494	20	0.7	20	1	ADH59620	Human oligonucleot
C 422	20	0.7	20	1	AAV34591	Electrochemical det	495	20	0.7	20	1	ADH59620	Human oligonucleot
C 423	20	0.7	20	1	AAV34591	Electrochemical det	496	20	0.7	20	1	ADH59620	Human oligonucleot
C 424	20	0.7	20	1	AAV34591	Stem cell factor u	497	20	0.7	20	1	ADH59620	Human oligonucleot
C 425	20	0.7	20	1	AAV34591	Oligonucleotide #5	498	20	0.7	20	1	ADH59620	Human oligonucleot
C 426	20	0.7	20	1	AAV34591	2'-Methoxyethoxy-m	499	20	0.7	20	1	ADH59620	Human oligonucleot
C 427	20	0.7	20	1	AAV34591	Phosphorothioate p	500	20	0.7	20	1	ADH59620	Human oligonucleot
C 428	20	0.7	20	1	AAV34591	Digoxigenin-label	501	20	0.7	20	1	ADH59620	Human oligonucleot
C 429	20	0.7	20	1	AAV34591	Poly T oligonucleo	502	20	0.7	20	1	ADH59620	Human oligonucleot
C 430	20	0.7	20	1	AAV34591	DNA template for 3	503	20	0.7	20	1	ADH59620	Human oligonucleot
C 431	20	0.7	20	1	AAV34591	Capture probe CPs'	504	20	0.7	20	1	ADH59620	Human oligonucleot
C 432	20	0.7	20	1	AAV34591	Conjugate forming	505	20	0.7	20	1	ADH59620	Human oligonucleot
C 433	20	0.7	20	1	AAV34591	Oligonucleotide-na	C 506	20	0.7	20	1	ADH59620	Human oligonucleot
C 434	20	0.7	20	1	AAV34591	Human Ku autoantig	C 507	20	0.7	20	1	ADH59620	Human oligonucleot
C 435	20	0.7	20	1	AAV34591	Random oligonucleo	508	20	0.7	20	1	ADH59620	Human oligonucleot
C 436	20	0.7	20	1	AAV34591	Oligonucleotide-cy	509	20	0.7	20	1	ADH59620	Human oligonucleot
C 437	20	0.7	20	1	AAV34591	Immunostimulatory	510	20	0.7	20	1	ADH59620	Human oligonucleot
C 438	20	0.7	20	1	AAV34591	Immunostimulatory	511	20	0.7	20	1	ADH59620	Human oligonucleot
C 439	20	0.7	20	1	AAV34591	Immunostimulatory	512	20	0.7	20	1	ADH59620	Human oligonucleot
C 440	20	0.7	20	1	AAV34591	Universal stem cel	513	20	0.7	20	1	ADH59620	Human oligonucleot
C 441	20	0.7	20	1	AAV34591	Oligonucleotide #1	514	20	0.7	20	1	ADH59620	Human oligonucleot
C 442	20	0.7	20	1	AAV34591	Nucleotide sequenc	515	20	0.7	20	1	ADH59620	Human oligonucleot
C 443	20	0.7	20	1	AAV34591	DNA oligomer #1.	516	20	0.7	20	1	ADH59620	Human oligonucleot
C 444	20	0.7	20	1	AAV34591	Human SCF (stem ce	517	20	0.7	20	1	ADH59620	Human oligonucleot
C 445	20	0.7	20	1	AAV34591	Human KUAPP70 gene	518	20	0.7	20	1	ADH59620	Human oligonucleot
C 446	20	0.7	20	1	AAV34591	Mammalian stem cel	519	20	0.7	20	1	ADH59620	Human oligonucleot
C 447	20	0.7	20	1	AAV34591	Human SCF (stem ce	520	20	0.7	20	1	ADH59620	Human oligonucleot
C 448	20	0.7	20	1	AAV34591	Human stem cell fa	C 521	20	0.7	20	1	ADH59620	Human oligonucleot
C 449	20	0.7	20	1	AAV34591	Angiogenesis inhib	C 522	20	0.7	20	1	ADH59620	Human oligonucleot
C 450	20	0.7	20	1	AAV34591	Angiogenesis inhib	523	20	0.7	20	1	ADH59620	Human oligonucleot
C 451	20	0.7	20	1	AAV34591	Angiogenesis inhib	524	20	0.7	20	1	ADH59620	Human oligonucleot
C 452	20	0.7	20	1	AAV34591	Immunostimulatory	525	20	0.7	20	1	ADH59620	Human oligonucleot
C 453	20	0.7	20	1	AAV34591	Immunostimulatory	526	20	0.7	20	1	ADH59620	Human oligonucleot
C 454	20	0.7	20	1	AAV34591	Immunostimulatory	527	20	0.7	20	1	ADH59620	Human oligonucleot
C 455	20	0.7	20	1	AAV34591	CD14 receptor PCR	528	20	0.7	20	1	ADH59620	Human oligonucleot
C 456	20	0.7	20	1	AAV34591	Nanoparticle-oligo	529	20	0.7	20	1	ADH59620	Human oligonucleot
C 457	20	0.7	20	1	AAV34591	Nanoparticle-oligo	C 530	20	0.7	20	1	ADH59620	Human oligonucleot
C 458	20	0.7	20	1	AAV34591	Rat SCF 5' cDNA am	531	20	0.7	20	1	ADH59620	Human oligonucleot
C 459	20	0.7	20	1	AAV34591	SCF universal olig	532	20	0.7	20	1	ADH59620	Human oligonucleot
C 460	20	0.7	20	1	AAV34591	Oligonucleotide sy	533	20	0.7	20	1	ADH59620	Human oligonucleot
C 461	20	0.7	20	1	AAV34591	M tuberculosis rRN	534	20	0.7	20	1	ADH59620	Human oligonucleot
C 462	20	0.7	20	1	AAV34591	Nucleic acid detec	535	20	0.7	20	1	ADH59620	Human oligonucleot
C 463	20	0.7	20	1	AAV34591	Nucleic acid detec	536	20	0.7	20	1	ADH59620	Human oligonucleot
C 464	20	0.7	20	1	AAV34591	Capture probe CPs'	537	20	0.7	20	1	ADH59620	Human oligonucleot
C 465	20	0.7	20	1	AAV34591	Thiol-modified oli	538	20	0.7	20	1	ADH59620	Human oligonucleot
C 466	20	0.7	20	1	AAV34591	Potato gene PCR pr	539	20	0.7	20	1	ADH59620	Human oligonucleot
C 467	20	0.7	20	1	AAV34591	Thio-modified 20da	540	20	0.7	20	1	ADH59620	Human oligonucleot
C 468	20	0.7	20	1	AAV34591	Nanoparticle-assoc	541	20	0.7	20	1	ADH59620	Human oligonucleot
C 469	20	0.7	20	1	AAV34591	Nanotechnology nuc	542	20	0.7	20	1	ADH59620	Human oligonucleot
C 470	20	0.7	20	1	AAV34591	Nanotechnology nuc	C 543	20	0.7	20	1	ADH59620	Human oligonucleot
C 471	20	0.7	20	1	AAV34591	Nanotechnology nuc	544	20	0.7	20	1	ADH59620	Human oligonucleot

C 691	19.4	0.7	21	1	AA075646	Reverse transcript	C 764	19	0.7	19	1	AA081927	Polynucleotide str
C 692	19.4	0.7	21	1	AA075753	Reverse transcript	C 765	19	0.7	19	1	AA201358	PCR primer for PGI
C 693	19.4	0.7	21	1	AA075728	Reverse transcript	C 766	19	0.7	19	1	AA261390	Uniform phosphodie
C 694	19.4	0.7	21	1	AA075680	Reverse transcript	C 767	19	0.7	19	1	AAZ61404	2'-O-modified ribo
C 695	19.4	0.7	21	1	AA075716	Reverse transcript	C 768	19	0.7	19	1	AAZ62422	T19 diester for us
C 696	19.4	0.7	21	1	AA075649	Reverse transcript	C 769	19	0.7	19	1	AAZ95241	Modified oligonucle
C 697	19.4	0.7	21	1	AA075776	Reverse transcript	C 770	19	0.7	19	1	AAZ95240	Modified oligonucle
C 698	19.4	0.7	21	1	AA075704	Reverse transcript	C 771	19	0.7	19	1	AAA06839	Modified T-contain
C 699	19.4	0.7	21	1	AA075708	Reverse transcript	C 772	19	0.7	19	1	AAA06839	Oligonucleotide IS
C 700	19.4	0.7	21	1	AA075777	Reverse transcript	C 773	19	0.7	19	1	AAA88952	2'-Modified chimera
C 701	19.4	0.7	21	1	AA075616	Reverse transcript	C 774	19	0.7	19	1	AAA88952	Oligonucleotide IS
C 702	19.4	0.7	21	1	AA075696	Reverse transcript	C 775	19	0.7	19	1	AAA88950	Oligonucleotide IS
C 703	19.4	0.7	21	1	AA075721	Reverse transcript	C 776	19	0.7	19	1	AAA88951	Oligonucleotide IS
C 704	19.4	0.7	21	1	AA075744	Reverse transcript	C 777	19	0.7	19	1	AAA88947	Oligonucleotide IS
C 705	19.4	0.7	21	1	AAV35395	HIV-1 gag protein	C 778	19	0.7	19	1	AAA88948	Oligonucleotide IS
C 706	19.4	0.7	21	1	AA242420	Complementary nucl	C 779	19	0.7	19	1	AA071630	Phosphorothioate 2
C 707	19.4	0.7	21	1	ABX79794	EST polymorphic DN	C 780	19	0.7	19	1	AA071630	Cleavage of nuclei
C 708	19.4	0.7	21	1	ADK01309	Rat DNA microarray	C 781	19	0.7	19	1	AAF31458	Oligonucleotide IS
C 709	19.4	0.7	21	1	ADK01314	Rat DNA microarray	C 782	19	0.7	19	1	AAF31458	ISIS sequence 3222
C 710	19.4	0.7	21	1	ADK01333	Rat DNA microarray	C 783	19	0.7	19	1	AAH46460	Oligonucleotide #8
C 711	19.4	0.7	21	1	ADK01340	Rat DNA microarray	C 784	19	0.7	19	1	AAH46460	Oligonucleotide #8
C 712	19.4	0.7	21	1	ADK01284	Rat DNA microarray	C 785	19	0.7	19	1	AAH25737	Human type II RNase
C 713	19.4	0.7	21	1	ADK01293	Rat DNA microarray	C 786	19	0.7	19	1	AAH25737	Human type II RNase
C 714	19.4	0.7	21	1	ADK01328	Rat DNA microarray	C 787	19	0.7	19	1	AAH25738	2'-O-N-[2-(dimethyl
C 715	19.4	0.7	21	1	ADK01337	Rat DNA microarray	C 788	19	0.7	19	1	AAH25738	Nucleic acid quant
C 716	19.4	0.7	21	1	ADK01282	Rat DNA microarray	C 789	19	0.7	19	1	ABA91951	Methyl thioethyl m
C 717	19.4	0.7	21	1	ADK01334	Rat DNA microarray	C 790	19	0.7	19	1	ABA91951	Dimethylaminopropyl
C 718	19.4	0.7	21	1	ADK01296	Rat DNA microarray	C 791	19	0.7	19	1	ABA91950	Methoxyethoxy modi
C 719	19.4	0.7	21	1	ADK01338	Rat DNA microarray	C 792	19	0.7	19	1	ABL51520	Tailing reaction r
C 720	19.4	0.7	21	1	ADK01320	Rat DNA microarray	C 793	19	0.7	19	1	AD42000	Oligonucleotide #3
C 721	19.4	0.7	21	1	ADK01304	Rat DNA microarray	C 794	19	0.7	19	1	AD42002	Oligonucleotide #5
C 722	19.4	0.7	21	1	ADK01325	Rat DNA microarray	C 795	19	0.7	19	1	AD42004	Oligonucleotide #7
C 723	19.4	0.7	21	1	ADK01292	Rat DNA microarray	C 796	19	0.7	19	1	AD42010	Oligonucleotide #1
C 724	19.4	0.7	21	1	ADK01312	Rat DNA microarray	C 797	19	0.7	19	1	AD42020	Oligonucleotide #2
C 725	19.4	0.7	21	1	ADK01298	Rat DNA microarray	C 798	19	0.7	19	1	AD42001	Oligonucleotide #4
C 726	19.4	0.7	21	1	ADK01336	Rat DNA microarray	C 799	19	0.7	19	1	AD42011	Oligonucleotide #1
C 727	19.4	0.7	21	1	ADW1579	Oligonucleotide DS	C 800	19	0.7	19	1	AD42003	Oligonucleotide #6
C 728	19.4	0.7	21	1	ADW1578	Oligonucleotide DS	C 801	19	0.7	19	1	AD41998	Oligonucleotide #1
C 729	19.4	0.7	21	1	AED42748	Protein interactin	C 802	19	0.7	19	1	AD41999	Oligonucleotide #2
C 730	19.4	0.7	21	1	AAT68615	DNA probe used in	C 803	19	0.7	19	1	AD42009	Oligonucleotide #1
C 731	19.4	0.7	24	1	AAZ00877	PCR primer PGR32	C 804	19	0.7	19	1	AB258336	Oligonucleotide w1
C 732	19.4	0.7	24	1	ABK12409	RT-PCR primer #1 f	C 805	19	0.7	19	1	AB258336	Modified oligomer1
C 733	19.4	0.7	24	1	AB223536	fragment of a plas	C 806	19	0.7	19	1	ADH97218	Modified oligomer1
C 734	19.4	0.7	24	1	AD444221	Caenorhabditis ele	C 807	19	0.7	19	1	ADH97218	Synthetically modi
C 735	19.2	0.7	21	1	ACC48482	Locked nucleic aci	C 808	19	0.7	19	1	ADH97214	Synthetically modi
C 736	19.2	0.7	21	1	ACC99729	Oligonucleotide.	C 809	19	0.7	19	1	ADH97214	Synthetically modi
C 737	19.2	0.7	24	1	AAF98935	Immunostimulatory	C 810	19	0.7	19	1	ADG28485	Modified oligonucle
C 738	19.2	0.7	24	1	ABA05517	Human Tce carcinog	C 811	19	0.7	19	1	ADG47994	Oligonucleotide #3
C 739	19.2	0.7	24	1	ABX75776	Angiogenesis inhib	C 812	19	0.7	19	1	ADG47994	Oligonucleotide #3
C 740	19.2	0.7	24	1	ABA99264	Human tra oncogene	C 813	19	0.7	19	1	ADG47998	Oligonucleotide #5
C 741	19.2	0.7	24	1	ABK13715	RT-PCR primer #2 f	C 814	19	0.7	19	1	ADG47998	Guanidinium functi
C 742	19.2	0.7	24	1	ACD99368	Immunostimulatory	C 815	19	0.7	19	1	ADH42933	Guanidinium functi
C 743	19.2	0.7	24	1	ADB36437	Immunostimulatory	C 816	19	0.7	19	1	ADH42933	Guanidinium functi
C 744	19.2	0.7	24	1	ADG75925	Immunostimulatory	C 817	19	0.7	19	1	ADH42932	Modified antisease
C 745	19.2	0.7	24	1	ADG75926	Immunostimulatory	C 818	19	0.7	19	1	ADJ77769	Exemplary DNA mole
C 746	19.2	0.7	24	1	ADG75922	Immunostimulatory	C 819	19	0.7	19	1	ADJ77769	2'-O-MOB-2-thio mo
C 747	19.2	0.7	24	1	ADG75924	Immunostimulatory	C 820	19	0.7	19	1	ADM47150	Oligonucleotide #4
C 748	19.2	0.7	24	1	ADG76001	Non-CpG DNA oligon	C 821	19	0.7	19	1	ADOS8963	Oligo, to illustra
C 749	19.2	0.7	24	1	ADG76035	Immunostimulatory	C 822	19	0.7	19	1	ADOS8963	Tobacco cytochrome
C 750	19.2	0.7	24	1	ADG75919	Immunostimulatory	C 823	19	0.7	19	1	ADR82260	Hepatitis C virus
C 751	19.2	0.7	24	1	ADG75971	Immunostimulatory	C 824	19	0.7	19	1	ADR82260	Hepatitis C virus
C 752	19.2	0.7	24	1	ADG75920	Immunostimulatory	C 825	19	0.7	19	1	ADR82257	Hepatitis C virus
C 753	19.2	0.7	24	1	ADG75923	Immunostimulatory	C 826	19	0.7	19	1	ADR82257	Hepatitis C virus
C 754	19.2	0.7	24	1	ADG75921	Immunostimulatory	C 827	19	0.7	19	1	ADR82258	Hepatitis C virus
C 755	19.2	0.7	24	1	ADO81076	Cow prion protein	C 828	19	0.7	19	1	ADR82256	Hepatitis C virus
C 756	19.2	0.7	24	1	ADU89376	Allergic response	C 829	19	0.7	19	1	ADR82256	Hepatitis C virus
C 757	19.2	0.7	24	1	ADU89376	Allergic response	C 830	19	0.7	19	1	ADR82256	Hepatitis C virus
C 758	19.2	0.7	24	1	AED74921	Reverse transcript	C 831	19	0.7	19	1	ADT85248	Hepatitis C virus
C 759	19.2	0.7	24	1	AAQ75551	Oligonucleotide pr	C 832	19	0.7	19	1	ADT85248	Hepatitis C virus
C 760	19.2	0.7	19	1	AAT10757	Aminoxy-modified	C 833	19	0.7	19	1	ADT85248	Hepatitis C virus
C 761	19.2	0.7	19	1	AAV07878	Oligonucleotide co	C 834	19	0.7	19	1	ADT85248	Hepatitis C virus
C 762	19.2	0.7	19	1	AAV06820	5' amino oligonucle	C 835	19	0.7	19	1	ADT85247	Hepatitis C virus
C 763	19.2	0.7	19	1	AA081316		C 836	19	0.7	19	1	ABE28528	Antisense oligonuc

837	19	0.7	19	STAT-3 siRNA antis	c 910	18.4	0.7	20	1	AAQ75568	Reverse transcript
c 838	19	0.7	19	STAT-3 siRNA target	c 911	18.4	0.7	20	1	AAQ75589	Reverse transcript
c 839	19	0.7	19	Human NCOG receptor	c 912	18.4	0.7	20	1	AAQ75593	Reverse transcript
c 840	19	0.7	19	Human NCOG receptor	c 913	18.4	0.7	20	1	AAQ75561	Reverse transcript
c 841	19	0.7	20	Cytochrome P450 se	c 914	18.4	0.7	20	1	AAQ75601	Reverse transcript
c 842	19	0.7	20	Reverse transcript	c 915	18.4	0.7	20	1	AAQ75581	Reverse transcript
c 843	19	0.7	20	Reverse transcript	c 916	18.4	0.7	20	1	AAQ75600	Reverse transcript
c 844	19	0.7	20	Reverse transcript	c 917	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 845	19	0.7	20	Reverse transcript	c 918	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 846	19	0.7	20	Reverse transcript	c 919	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 847	19	0.7	20	Reverse transcript	c 920	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 848	19	0.7	20	Reverse transcript	c 921	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 849	19	0.7	20	Reverse transcript	c 922	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 850	19	0.7	20	Reverse transcript	c 923	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 851	19	0.7	20	Reverse transcript	c 924	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 852	19	0.7	20	Reverse transcript	c 925	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 853	19	0.7	20	Reverse transcript	c 926	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 854	19	0.7	20	Reverse transcript	c 927	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 855	19	0.7	20	Reverse transcript	c 928	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 856	19	0.7	20	Reverse transcript	c 929	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 857	19	0.7	20	Reverse transcript	c 930	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 858	19	0.7	20	Reverse transcript	c 931	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 859	19	0.7	20	Reverse transcript	c 932	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 860	19	0.7	20	Reverse transcript	c 933	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 861	19	0.7	20	Reverse transcript	c 934	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 862	19	0.7	20	Reverse transcript	c 935	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 863	19	0.7	20	Reverse transcript	c 936	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 864	19	0.7	20	Reverse transcript	c 937	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 865	19	0.7	20	Reverse transcript	c 938	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 866	19	0.7	20	Reverse transcript	c 939	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 867	19	0.7	20	Reverse transcript	c 940	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 868	19	0.7	20	Reverse transcript	c 941	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 869	19	0.7	20	Reverse transcript	c 942	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 870	19	0.7	20	Reverse transcript	c 943	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 871	19	0.7	20	Reverse transcript	c 944	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 872	19	0.7	20	Reverse transcript	c 945	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 873	19	0.7	20	Reverse transcript	c 946	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 874	19	0.7	20	Reverse transcript	c 947	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 875	19	0.7	20	Reverse transcript	c 948	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 876	19	0.7	20	Reverse transcript	c 949	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 877	19	0.7	20	Reverse transcript	c 950	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 878	19	0.7	20	Reverse transcript	c 951	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 879	19	0.7	20	Reverse transcript	c 952	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 880	19	0.7	20	Reverse transcript	c 953	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 881	19	0.7	20	Reverse transcript	c 954	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 882	19	0.7	20	Reverse transcript	c 955	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 883	19	0.7	20	Reverse transcript	c 956	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 884	19	0.7	20	Reverse transcript	c 957	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 885	19	0.7	20	Reverse transcript	c 958	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 886	19	0.7	20	Reverse transcript	c 959	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 887	19	0.7	20	Reverse transcript	c 960	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 888	19	0.7	20	Reverse transcript	c 961	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 889	19	0.7	20	Reverse transcript	c 962	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 890	19	0.7	20	Reverse transcript	c 963	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 891	19	0.7	20	Reverse transcript	c 964	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 892	19	0.7	20	Reverse transcript	c 965	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 893	19	0.7	20	Reverse transcript	c 966	18.4	0.7	20	1	AAQ75595	Reverse transcript
c 894	18.8	0.7	22	Reverse transcript	c 967	18.4	0.7	21	1	AAQ75752	Reverse transcript
c 895	18.8	0.7	22	Reverse transcript	c 968	18.4	0.7	21	1	AAQ75626	Reverse transcript
c 896	18.8	0.7	22	Reverse transcript	c 969	18.4	0.7	21	1	AAQ75676	Reverse transcript
c 897	18.8	0.7	22	Reverse transcript	c 970	18.4	0.7	21	1	AAQ75719	Reverse transcript
c 898	18.8	0.7	22	Reverse transcript	c 971	18.4	0.7	21	1	AAQ75778	Reverse transcript
c 899	18.8	0.7	22	Reverse transcript	c 972	18.4	0.7	21	1	AAQ75618	Reverse transcript
c 900	18.8	0.7	22	Reverse transcript	c 973	18.4	0.7	21	1	AAQ75729	Reverse transcript
c 901	18.8	0.7	22	Reverse transcript	c 974	18.4	0.7	21	1	AAQ75730	Reverse transcript
c 902	18.8	0.7	23	Reverse transcript	c 975	18.4	0.7	21	1	AAQ75773	Reverse transcript
c 903	18.8	0.7	51	Reverse transcript	c 976	18.4	0.7	21	1	AAQ75695	Reverse transcript
c 904	18.6	0.7	60	Reverse transcript	c 977	18.4	0.7	21	1	AAQ75650	Reverse transcript
c 905	18.4	0.7	20	Reverse transcript	c 978	18.4	0.7	21	1	AAQ75682	Reverse transcript
c 906	18.4	0.7	20	Reverse transcript	c 979	18.4	0.7	21	1	AAQ75678	Reverse transcript
c 907	18.4	0.7	20	Reverse transcript	c 980	18.4	0.7	21	1	AAQ75615	Reverse transcript
c 908	18.4	0.7	20	Reverse transcript	c 981	18.4	0.7	21	1	AAQ75727	Reverse transcript
c 909	18.4	0.7	20	Reverse transcript	c 982	18.4	0.7	21	1	AAQ75743	Reverse transcript

c 983	18.4	0.7	21	1	AAQ75722	Reverse transcript	1056	18	0.7	18	1	AAZ87167
c 984	18.4	0.7	21	1	AAQ75775	Reverse transcript	c1057	18	0.7	18	1	AAO35565
c 985	18.4	0.7	21	1	AAQ75697	Reverse transcript	1058	18	0.7	18	1	AAO17014
c 986	18.4	0.7	21	1	AAQ75746	Reverse transcript	c1059	18	0.7	18	1	AAQ99708
c 987	18.4	0.7	21	1	AAQ75617	Reverse transcript	c1060	18	0.7	18	1	AAQ99734
c 988	18.4	0.7	21	1	AAQ75624	Reverse transcript	c1061	18	0.7	18	1	AAQ82472
c 989	18.4	0.7	21	1	AAQ75698	Reverse transcript	c1062	18	0.7	18	1	AAQ94743
c 990	18.4	0.7	21	1	AAQ75751	Reverse transcript	c1063	18	0.7	18	1	ABQ78455
c 991	18.4	0.7	21	1	AAQ75623	Reverse transcript	c1064	18	0.7	18	1	ABQ78429
c 992	18.4	0.7	21	1	AAQ75645	Reverse transcript	c1065	18	0.7	18	1	ABQ139401
c 993	18.4	0.7	21	1	AAQ75754	Reverse transcript	c1066	18	0.7	18	1	AAQ41497
c 994	18.4	0.7	21	1	AAQ75644	Reverse transcript	c1067	18	0.7	18	1	ABQ53437
c 995	18.4	0.7	21	1	AAQ75679	Reverse transcript	c1068	18	0.7	18	1	ABA93239
c 996	18.4	0.7	21	1	AAQ75774	Reverse transcript	1069	18	0.7	18	1	AAQ56466
c 997	18.4	0.7	21	1	AAQ75677	Reverse transcript	c1070	18	0.7	18	1	AAQ56440
c 998	18.4	0.7	21	1	AAQ75745	Reverse transcript	c1071	18	0.7	18	1	AAQ56446
c 999	18.4	0.7	21	1	AAQ75772	Reverse transcript	c1072	18	0.7	18	1	AAQ33247
c1000	18.4	0.7	21	1	AAQ75647	Reverse transcript	c1073	18	0.7	18	1	AAQ57871
c1001	18.4	0.7	21	1	AAQ75720	Reverse transcript	c1074	18	0.7	18	1	AAQ57878
c1002	18.4	0.7	21	1	ADK01318	Rat DNA microarray	c1075	18	0.7	18	1	AAQ57879
c1003	18.4	0.7	21	1	ADK01313	Rat DNA microarray	c1076	18	0.7	18	1	AAQ57877
c1004	18.4	0.7	21	1	ADK01319	Rat DNA microarray	1077	18	0.7	18	1	AAQ57890
c1005	18.4	0.7	21	1	ADK01297	Rat DNA microarray	c1078	18	0.7	18	1	ADQ37210
c1006	18.4	0.7	21	1	ADK01302	Rat DNA microarray	c1079	18	0.7	18	1	ADQ37236
c1007	18.4	0.7	21	1	ADK01317	Rat DNA microarray	1080	18	0.7	18	1	ADQ77617
c1008	18.4	0.7	21	1	ADK01303	Rat DNA microarray	c1081	18	0.7	18	1	ADZ47933
c1009	18.4	0.7	21	1	ADK01327	Rat DNA microarray	c1082	18	0.7	18	1	ADQ134489
c1010	18.4	0.7	21	1	ADK01316	Rat DNA microarray	1083	18	0.7	18	1	ADQ78590
c1011	18.4	0.7	21	1	ADK01299	Rat DNA microarray	1084	18	0.7	18	1	ADQ28710
c1012	18.4	0.7	21	1	ADK01301	Rat DNA microarray	c1085	18	0.7	18	1	ADQ28711
c1013	18.4	0.7	21	1	ADK01315	Rat DNA microarray	c1086	18	0.7	18	1	ADQ26684
c1014	18.4	0.7	21	1	ADK01326	Rat DNA microarray	1087	18	0.7	18	1	ADQ26682
c1015	18.4	0.7	21	1	ADK01300	Rat DNA microarray	c1088	18	0.7	18	1	ADQ61130
c1016	18.4	0.7	21	1	ADK01310	Rat DNA microarray	c1089	18	0.7	18	1	ADQ32355
c1017	18.4	0.7	21	1	ADK01311	Rat DNA microarray	c1090	18	0.7	18	1	ADQ57967
1018	18.4	0.7	22	1	ABA93328	PolyA adaptor olig	c1091	18	0.7	18	1	ADQ55010
1019	18.4	0.7	23	1	AAQ75028	LCR oligo 2. Synth	1092	18	0.7	18	1	ADQ30833
c1020	18.4	0.7	23	1	AAQ75029	LCR oligo 3. Synth	c1093	18	0.7	18	1	ADU90255
c1021	18.2	0.7	19	1	AAQ75029	(-)-limonene-6-hyd	c1094	18	0.7	18	1	ADU90229
c1022	18.2	0.7	19	1	AAQ299489	Primer HOOK for CD	c1095	18	0.7	18	1	ADU56134
c1023	18.2	0.7	19	1	AAQ15201	3', sequencing prim	c1096	18	0.7	18	1	ADU11817
c1024	18.2	0.7	19	1	AAH21968	Mouse total gene e	c1097	18	0.7	18	1	ADU10182
c1025	18.2	0.7	19	1	AAQ76617	Spearmit (-)-limo	c1098	18	0.7	18	1	ADW86820
c1026	18.2	0.7	19	1	AAQ66525	Mouse microglia an	c1099	18	0.7	18	1	ADW86817
c1027	18.2	0.7	19	1	ABK71509	CNS related 3', seq	c1100	18	0.7	18	1	AEA89505
c1028	18.2	0.7	19	1	ABQ73231	Rabbit atheroscle	c1101	18	0.7	18	1	AEA68153
c1029	18.2	0.7	19	1	AAQ34663	PCR primer #4 used	c1102	18	0.7	18	1	AEA87723
c1030	18.2	0.7	19	1	AAQ40279	HOOK PCR primer us	c1103	18	0.7	18	1	AEA75673
c1031	18.2	0.7	19	1	ABZ68389	Reverse transcript	c1104	18	0.7	18	1	AEA67970
c1032	18.2	0.7	19	1	ACC79402	M13 sequencing pri	c1105	18	0.7	18	1	AEF26309
c1033	18.2	0.7	19	1	AAQ49149	3', sequencing prim	c1106	18	0.7	18	1	AEF31353
c1034	18.2	0.7	19	1	AAQ50267	3', sequencing prim	c1107	18	0.7	18	1	AAQ75552
c1035	18.2	0.7	19	1	ADQ221495	Human PRRI-BF1 RT-	c1108	18	0.7	19	1	AAQ75553
1036	18.2	0.7	19	1	ADQ74670	DNA oligo. (30) use	c1109	18	0.7	19	1	AAQ75554
c1037	18.2	0.7	19	1	ADY39466	Intestinal epithel	c1110	18	0.7	19	1	ABL51521
c1038	18.2	0.7	19	1	ADQ266610	RT-PCR primer used	c1111	18	0.7	19	1	ABL51521
c1039	18.2	0.7	19	1	ADQ266610	Non-viable seed-pr	c1112	18	0.7	19	1	ABZ75398
c1040	18.2	0.7	19	1	AEQ221698	Oligo dTV primer,	c1113	18	0.7	19	1	ABZ75398
c1041	18.2	0.7	19	1	AED19813	Oligo(dT)18 primer	c1114	18	0.7	19	1	ADG28486
c1042	18.2	0.7	19	1	AED21472	Primer d(T)18, Seq	c1115	18	0.7	19	1	ADG28486
c1043	18.2	0.7	19	1	AED60795	Synthetic primer #	c1116	18	0.7	19	1	ADG28486
c1044	18.2	0.7	19	1	AED87374	Plant promoter ass	c1117	18	0.7	19	1	ADG28486
c1045	18.2	0.7	19	1	ABF26613	Oligo(dT)18 primer	c1118	18	0.7	19	1	ADG28486
c1046	18.2	0.7	20	1	AAQ209197	Oligonucleotide 9	c1119	18	0.7	19	1	ADG28486
1047	18	0.7	18	1	AAQ34110	Sequence of a micr	c1120	18	0.7	19	1	ADG28486
c1048	18	0.7	18	1	AAQ75025	PCR primer. Synth	c1121	18	0.7	19	1	ADG28486
c1049	18	0.7	18	1	AAQ94667	Anchored poly(T) o	c1122	18	0.7	19	1	ADG28486
c1050	18	0.7	18	1	AAV21970	Nuclease resistant	c1123	18	0.7	19	1	ADG28486
c1051	18	0.7	18	1	AAQ19943	Primer SEQ ID NO:3	c1124	18	0.7	19	1	ADG28486
1052	18	0.7	18	1	AAQ19943	Primer SEQ ID NO:2	c1125	18	0.7	19	1	ADG28486
1053	18	0.7	18	1	AAQ287161	Oligoarabinonucleo	c1126	18	0.7	19	1	ADG28486
c1054	18	0.7	18	1	AAQ287162	Oligoarabinonucleo	c1127	18	0.7	20	1	AAQ75586
c1055	18	0.7	18	1	AAQ287166	Deoxyarabinonucleo	c1128	18	0.7	20	1	AAQ75588

c1275	17.4	0.6	21	1	AAQ75741	Reverse transcript	1348	17	0.6	20	1	ABD25244	AI051839-derived o
c1276	17.4	0.6	21	1	AAQ75763	Reverse transcript	1349	17	0.6	20	1	ABD26126	AA463249-derived o
c1277	17.4	0.6	21	1	AAQ75742	Reverse transcript	c1350	17	0.6	20	1	ADH67409	Human glucocortic o
c1278	17.4	0.6	21	1	AAQ75747	Reverse transcript	c1351	17	0.6	20	1	ADK75123	Chimeric phosphoro
c1279	17.4	0.6	21	1	AAQ75758	Reverse transcript	c1352	17	0.6	20	1	ADK74838	Chimeric phosphoro
c1280	17.4	0.6	21	1	AAQ75764	Reverse transcript	c1353	17	0.6	21	1	AAQ75670	Reverse transcript
c1281	17.4	0.6	21	1	AAQ75628	Reverse transcript	c1354	17	0.6	21	1	AAQ75795	Reverse transcript
c1282	17.4	0.6	21	1	AAQ75636	Reverse transcript	c1355	17	0.6	21	1	AAQ75661	Reverse transcript
c1283	17.4	0.6	21	1	AAQ75610	Reverse transcript	c1356	17	0.6	21	1	AAQ75669	Reverse transcript
c1284	17.4	0.6	21	1	AAQ75756	Reverse transcript	c1357	17	0.6	21	1	AAQ75798	Reverse transcript
c1285	17.4	0.6	21	1	AAQ75619	Reverse transcript	c1358	17	0.6	21	1	AAQ75668	Reverse transcript
c1286	17.4	0.6	21	1	AAQ75621	Reverse transcript	c1359	17	0.6	21	1	AAQ75794	Reverse transcript
c1287	17.4	0.6	21	1	AAQ75635	Reverse transcript	c1360	17	0.6	21	1	AAQ75660	Reverse transcript
c1288	17.4	0.6	21	1	AAQ75759	Reverse transcript	c1361	17	0.6	21	1	AAQ75667	Reverse transcript
c1289	17.4	0.6	21	1	AAQ75782	Reverse transcript	c1362	17	0.6	21	1	AAQ75786	Reverse transcript
c1290	17.4	0.6	21	1	AAQ75750	Reverse transcript	c1363	17	0.6	21	1	AAQ75788	Reverse transcript
c1291	17.4	0.6	21	1	AAQ75613	Reverse transcript	c1364	17	0.6	21	1	AAQ75791	Reverse transcript
c1292	17.4	0.6	21	1	AAQ75638	Reverse transcript	c1365	17	0.6	21	1	AAQ75655	Reverse transcript
c1293	17.4	0.6	21	1	AAQ75749	Reverse transcript	c1366	17	0.6	21	1	AAQ75663	Reverse transcript
c1294	17.4	0.6	21	1	AAQ75770	Reverse transcript	c1367	17	0.6	21	1	AAQ75796	Reverse transcript
c1295	17.4	0.6	21	1	AAQ75766	Reverse transcript	c1368	17	0.6	21	1	AAQ75797	Reverse transcript
c1296	17.4	0.6	21	1	AAV17253	Reverse transcript	c1369	17	0.6	21	1	AAQ75790	Reverse transcript
c1297	17.2	0.6	18	1	ADP04929	PCR primer 1 used	c1370	17	0.6	21	1	AAQ75656	Reverse transcript
c1298	17.2	0.6	19	1	AAQ94431	Template mRNA poly	c1371	17	0.6	21	1	AAQ75784	Reverse transcript
c1299	17.2	0.6	19	1	AAK18390	RT-PCR primer of t	c1372	17	0.6	21	1	AAQ75666	Reverse transcript
c1300	17	0.6	17	1	AAK25450	Oestrogen receptor	c1373	17	0.6	21	1	AAQ75658	Reverse transcript
c1301	17	0.6	17	1	AAK98232	Human retrovirus H	c1374	17	0.6	21	1	AAQ75789	Reverse transcript
c1302	17	0.6	17	1	AAK50197	2'-Methoxyethoxy-m	c1375	17	0.6	21	1	AAQ75783	Reverse transcript
c1303	17	0.6	17	1	ABT34715	Tumour suppression	c1376	17	0.6	21	1	ADH45661	MAF3K9 marker ampl
c1304	17	0.6	17	1	AAQ56441	Antisense oligo #2	c1377	16.8	0.6	20	1	AAT38295	Specific primer used
c1305	17	0.6	17	1	AAQ56448	2'-F-ANA antisense	c1378	16.8	0.6	20	1	AAS05713	Poly(pyrimidine Cxi
c1306	17	0.6	17	1	AAQ56449	2'-F-ANA antisense	c1379	16.8	0.6	20	1	AAS04740	PCR primer used to
c1307	17	0.6	17	1	AAQ56447	2'-F-ANA antisense	c1380	16.8	0.6	20	1	AAF83359	BAP28 gene fragmen
c1308	17	0.6	17	1	AAQ56450	2'-F-ANA antisense	c1381	16.8	0.6	20	1	ABT07486	Rat protein phosph
c1309	17	0.6	17	1	ADB40209	Tumour suppression	c1382	16.8	0.6	20	1	ABZ85669	Human oligonucleot
c1310	17	0.6	17	1	ACC52437	Human tumour suppr	c1383	16.8	0.6	20	1	ABZ89178	Human oligonucleot
c1311	17	0.6	17	1	ADL48642	Human IKK-gamma su	c1384	16.8	0.6	20	1	ABZ85535	Human oligonucleot
c1312	17	0.6	17	1	ADL34488	Nucleotide sequenc	c1385	16.8	0.6	20	1	ABD25408	AI122807-derived o
c1313	17	0.6	17	1	ADQ04016	Annealing primer u	c1386	16.8	0.6	20	1	ABD21765	Human stannioalci
c1314	17	0.6	17	1	ADP86178	CpG immunostimulat	c1387	16.8	0.6	20	1	ADH70655	Human VEGF co-regu
c1315	17	0.6	17	1	ADP86137	CpG immunostimulat	c1388	16.8	0.6	20	1	ADH70655	Human VEGF co-regu
c1316	17	0.6	17	1	ADP86137	Poly dt primer SEQ	c1389	16.8	0.6	20	1	ADL01298	Human mPEG5-1 Chim
c1317	17	0.6	17	1	AEC87079	IL-10 expression a	c1390	16.8	0.6	20	1	ADM14429	Cow prion protein
c1318	17	0.6	17	1	AED81285	Common marmoset 18	c1391	16.8	0.6	21	1	ADQ81058	TRPM4 target oligo
c1319	17	0.6	17	1	ABF82502	Anchored poly(T) o	c1392	16.8	0.6	21	1	ADZ11210	Human STAT3-specif
c1320	17	0.6	18	1	AAT94668	Anchored poly(T) o	c1393	16.8	0.6	18	1	AQ30446	Oligomer TNFR341 f
c1321	17	0.6	18	1	AAT94669	Nucleotide sequenc	c1394	16.4	0.6	18	1	AAF75598	Binary encoded seq
c1322	17	0.6	18	1	AAV54170	Human protein AQ2	c1395	16.4	0.6	18	1	AAF75597	5'-PCR primer used
c1323	17	0.6	18	1	AAV7712	Phosphorothioate o	c1396	16.4	0.6	18	1	ABK13935	Nucleotide sequenc
c1324	17	0.6	18	1	AAV07750	RT-PCR primer of t	c1397	16.4	0.6	18	1	ACF36339	Nucleotide sequenc
c1325	17	0.6	18	1	AAK18373	RT-PCR primer of t	c1398	16.4	0.6	18	1	ACF36364	Nucleotide sequenc
c1326	17	0.6	18	1	AAA40563	Human adult ovary	c1399	16.4	0.6	18	1	ACF36364	Nucleotide sequenc
c1327	17	0.6	18	1	AAZ90640	Human adipose tiss	c1400	16.4	0.6	19	1	ADZ29704	Mitogen activated
c1328	17	0.6	18	1	AAZ20091	mRNA fragment used	c1401	16.4	0.6	19	1	ADZ29704	Mitogen activated
c1329	17	0.6	18	1	ADK69542	Monocytledon tran	c1402	16.4	0.6	19	1	ADU64845	Human MAP kinase 1
c1330	17	0.6	19	1	AAQ75558	Reverse transcript	c1403	16.4	0.6	19	1	ADU64845	Human MAP kinase 1
c1331	17	0.6	19	1	AAQ75550	Reverse transcript	c1404	16.4	0.6	19	1	ADZ00541	Human AdipoR1 reve
c1332	17	0.6	19	1	ABD24924	AI095492-derived o	c1405	16.4	0.6	19	1	AEA99308	Human FasL TNFSF6
c1333	17	0.6	20	1	AAQ75574	Reverse transcript	c1406	16.4	0.6	19	1	AEA99308	Human FasL TNFSF6
c1334	17	0.6	20	1	AAQ75605	Reverse transcript	c1407	16.4	0.6	19	1	AEC90871	Human SDF-1 (CXCL1
c1335	17	0.6	20	1	AAQ75572	Reverse transcript	c1408	16.4	0.6	19	1	AEC90871	Human SDF-1 (CXCL1
c1336	17	0.6	20	1	AAQ75604	Reverse transcript	c1409	16.4	0.6	19	1	AE65553	STAT-3 siRNA antis
c1337	17	0.6	20	1	AAQ75573	Reverse transcript	c1410	16.4	0.6	19	1	AE65553	STAT-3 siRNA antis
c1338	17	0.6	20	1	AAQ75606	Reverse transcript	c1411	16.4	0.6	19	1	AEF36928	Human vitamin D re
c1339	17	0.6	20	1	AAQ75603	Reverse transcript	c1412	16.4	0.6	20	1	AAV12302	Human SDF-1 (CXCL1
c1340	17	0.6	20	1	AAQ75571	Nucleotide sequenc	c1413	16.4	0.6	20	1	AAV12302	Ribonucleotide red
c1341	17	0.6	20	1	ABQ79871	Hepatitis B virus	c1414	16.4	0.6	20	1	AAQ1207	Human FUT6 antisen
c1342	17	0.6	20	1	ABA05917	Human oligonucleot	c1415	16.4	0.6	20	1	AAQ1207	Antisense IGFBP-5
c1343	17	0.6	20	1	ABZ89896	Human oligonucleot	c1416	16.4	0.6	20	1	ADF87936	Single nucleotide
c1344	17	0.6	20	1	ABZ89703	Human oligonucleot	c1417	16.4	0.6	20	1	ADF87936	Human oligonucleot
c1345	17	0.6	20	1	ABZ89719	Human oligonucleot	c1418	16.4	0.6	20	1	ABD21762	Human stannioalci
c1346	17	0.6	20	1	ABZ89014	Human oligonucleot	c1419	16.4	0.6	20	1	ADH66380	Human glucocortic o
c1347	17	0.6	20	1	ABD25949	AA906703-derived o	c1420	16.4	0.6	20	1	ADJ61530	Oligonucleotide as

c1421	16.4	20	1	ADK73725	Chimeric phosphoro	c1494	16	0.6	18	1	ADL95318	Anti-proliferative
1422	16.4	20	1	ADK46920	Human oligonucleot	1495	16	0.6	18	1	AEC52473	Antisense oligonuc
c1423	16.4	20	1	ADP69379	Human mitonEET-spe	1496	16	0.6	18	1	AEC52193	Antisense oligonuc
c1424	16.2	18	1	AAK18389	RT-PCR primer of t	1497	16	0.6	18	1	AEC52333	Antisense oligonuc
c1425	16	16	1	AAK18368	RT-PCR primer of t	1498	16	0.6	19	1	ADK70862	5' mRNA DNA prepar
1426	16	16	1	AAK07568	Homo sapiens fetal	c1499	16	0.6	19	1	ADR81681	Hepatitis C virus
1427	16	16	1	AAK60688	DNA chip primer #4	c1500	16	0.6	19	1	ADR86138	Hepatitis C virus
c1428	16	16	1	AAK60688	DNA chip primer #4	c1501	16	0.6	19	1	AEA99200	Human Fas and FasL
c1429	16	16	1	ABA04585	Oligonucleotide #5	c1502	16	0.6	19	1	AEA99050	Human Fas and FasL
c1430	16	16	1	AAF30895	Oligonucleotide-mi	1503	16	0.6	19	1	AEA32216	Human ICAM1 siRNA
c1431	16	16	1	AAH42481	Oligonucleotide po	1504	16	0.6	19	1	AEA32050	Human ICAM1 siRNA
c1432	16	16	1	ABA97402	Oligonucleotide us	1505	16	0.6	20	1	ADK34499	7T18Apad P527-20-
c1433	16	16	1	AAK56451	Nucleotide sequenc	1506	16	0.6	20	1	ACA90051	Cardiovascular dis
c1434	16	16	1	AAK56451	2F-ANA antisense	1507	16	0.6	20	1	ABZ91658	Human oligonucleot
c1435	16	16	1	AAK56451	Oligo-homodeoxyrib	1508	16	0.6	20	1	ABD37888	AA25396-derived o
c1436	16	16	1	ADK68519	DNA hybridisation	c1509	16	0.6	20	1	ADH67050	Human glucocortic
c1437	16	16	1	ADK220614	DNA oligo #1 relat	c1510	16	0.6	20	1	ADK76466	Chimeric phosphoro
1438	16	16	1	ADK34487	Nucleotide sequenc	c1511	16	0.6	20	1	ADK75214	Chimeric phosphoro
c1439	16	16	1	ABE77257	Oligo, SEQ ID NO:	1512	16	0.6	20	1	AEF79008	Human dopamine rec
c1440	16	16	1	ABE34066	Zea mays ZmKSP7P1	1513	15.8	0.6	19	1	AAZ32679	Human IL-10 PCR pr
c1441	16	16	1	ABE63168	Family 16/15{inv(a	1514	15.8	0.6	19	1	ABZ79441	Acetyl-Coenzyme A-
c1442	16	16	1	ABE63150	Family 16/15{inv(a	1515	15.8	0.6	19	1	ADK93091	Human E2H2 siNA lo
c1443	16	16	1	AAK69800	Human flt1 VEGF re	1516	15.8	0.6	19	1	ADK93091	Human E2H2 transcr
c1444	16	16	1	AAK69801	Human flt1 VEGF re	1517	15.8	0.6	19	1	ADK93091	Human E2H2 transcr
c1445	16	16	1	AAK69801	Human eosinophil c	c1518	15.8	0.6	19	1	ADL79082	Human HER2 (EGFR2)
c1446	16	16	1	AAK18371	RT-PCR primer of t	1519	15.8	0.6	19	1	ADH01585	Protein tyrosine p
c1447	16	16	1	AAK18370	RT-PCR primer of t	c1520	15.8	0.6	19	1	ADH01585	Cow prion protein
c1448	16	16	1	AAK30179	PCR primer GT15A u	c1521	15.8	0.6	19	1	ADH01585	Human Glucose-6-ph
c1449	16	16	1	AAK82720	Human Iga nephropa	c1522	15.8	0.6	19	1	ADH01585	Glucose-6-phosphat
c1450	16	16	1	AAK35449	Anchored oligo(dT)	c1523	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1451	16	16	1	AAK5451	Oestrogen receptor	1524	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1452	16	16	1	AAK5451	Oestrogen receptor	1525	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1453	16	16	1	AAK5451	PCR anchor primer,	c1526	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1454	16	16	1	AAK5451	PCR anchor primer,	1527	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1455	16	16	1	AAK5451	PCR anchor primer,	c1528	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1456	16	16	1	AAK5451	PCR anchor primer,	c1529	15.8	0.6	19	1	ADH01585	XIAP targeting sir
c1457	16	16	1	AAK5451	PCR anchor primer,	1530	15.8	0.6	19	1	ADH01585	Human IL-4R transc
c1458	16	16	1	AAK5451	PCR anchor primer,	1531	15.8	0.6	19	1	ADH01585	Human IL-4R siRNA
c1459	16	16	1	AAK5451	Human pollinosis-a	c1532	15.8	0.6	19	1	ADH01585	Human IL-4R siRNA
c1460	16	16	1	AAK5451	Human pollinosis-a	1533	15.8	0.6	19	1	ADH01585	NOGO receptor targ
c1461	16	16	1	AAK5451	Human pollinosis-a	c1534	15.8	0.6	19	1	ADH01585	NOGO receptor sirN
c1462	16	16	1	AAK5451	5'-PCR primer used	1535	15.8	0.6	19	1	ADH01585	Human NOGO recepto
c1463	16	16	1	ABK13941	Human Acetyltransf	c1536	15.8	0.6	19	1	ADH01585	Human NOGO recepto
c1464	16	16	1	ABK13941	Nucleotide sequenc	1537	15.8	0.6	19	1	ADH01585	Human chondrocyte
c1465	16	16	1	ABK13941	Nucleotide sequenc	c1538	15.6	0.6	17	1	ADH01585	Anchored oligo(T)
c1466	16	16	1	ABK13941	Human allergic dis	c1539	15.6	0.6	17	1	ADH01585	RNA detecting prim
c1467	16	16	1	AAK49948	Human B153 expres	c1540	15.4	0.6	17	1	ADH01585	Oestrogen receptor
c1468	16	16	1	AAK49948	Allergic disease e	c1541	15.4	0.6	17	1	ADH01585	Oestrogen receptor
c1469	16	16	1	ABK49756	Human atopie derma	c1542	15.4	0.6	17	1	ADH01585	DNA-RNA-DNA oligon
c1470	16	16	1	ADK04271	Human MDZ7 scannin	c1543	15.4	0.6	17	1	ADH01585	Oligo-AT PCR prime
c1471	16	16	1	ADK04272	Human MDZ7 scannin	c1544	15.4	0.6	17	1	ADH01585	Human MDZ7 scannin
c1472	16	16	1	ACC65266	Murine oligonucleo	c1545	15.4	0.6	17	1	ADH01585	Human MDZ7 scannin
c1473	16	16	1	ABZ70578	Primer, Synthetic	c1546	15.4	0.6	17	1	ADH01585	Human MDZ7 scannin
c1474	16	16	1	ACF36370	Nucleotide sequenc	c1547	15.4	0.6	17	1	ADH01585	Human MDZ7 scannin
c1475	16	16	1	ADK84468	Nucleotide sequenc	c1548	15.4	0.6	17	1	ADH01585	Human MDZ7 scannin
c1476	16	16	1	ADK84468	PCR primer for amp	c1549	15.4	0.6	17	1	ADH01585	Human H-Ras DNazym
1477	16	16	1	ADK84468	Gene prediction ta	c1550	15.4	0.6	17	1	ADH01585	Human H-Ras substr
c1478	16	16	1	ADK84468	Human PCCP1 DNA fr	c1551	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1479	16	16	1	ADK84468	Human PCCP1 DNA fr	c1552	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1480	16	16	1	ADK84468	Human IKK-gamma su	c1553	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1481	16	16	1	ADK84468	Human IKK-gamma su	c1554	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1482	16	16	1	ADK84468	PCR primer GT15A u	c1555	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1483	16	16	1	ADK84468	IL-10 expression a	c1556	15.4	0.6	17	1	ADH01585	IL-10 expression a
1484	16	16	1	ADK84468	IL-10 expression a	c1557	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1485	16	16	1	AAK30173	L1 region of the b	c1558	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1486	16	16	1	AAK30173	Nucleotide sequenc	c1559	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1487	16	16	1	AAK30173	Nucleotide sequenc	c1560	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1488	16	16	1	AAK30173	Nucleotide sequenc	c1561	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1489	16	16	1	AAK30173	Human adipose tiss	c1562	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1490	16	16	1	AAK30173	Human adipose tiss	c1563	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1491	16	16	1	AAK30173	Human adipose tiss	c1564	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1492	16	16	1	AAK30173	Binary encoded seq	c1565	15.4	0.6	17	1	ADH01585	IL-10 expression a
c1493	16	16	1	AAK30173	Human cytomagalovi	1566	15.4	0.6	17	1	ADH01585	IL-10 expression a
				Primer used to pre								

c1567 15.4 0.6 18 1 AAQ30448 Oligomer TNFR943 f
c1568 15.4 0.6 18 1 AAQ30447 Oligomer TNFR942 f
c1569 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1570 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1571 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1572 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1573 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1574 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1575 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1576 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1577 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1578 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1579 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1580 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1581 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1582 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1583 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1584 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1585 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1586 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1587 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1588 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1589 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1590 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1591 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1592 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1593 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1594 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1595 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1596 15.4 0.6 18 1 AAQ30447 Human adipose tiss
c1597 15.2 0.6 16 1 AAQ30447 Human adipose tiss
c1598 15.2 0.6 17 1 AAQ30447 Human adipose tiss
c1599 15.2 0.6 17 1 AAQ30447 Human adipose tiss
c1600 15.2 0.6 19 1 AAQ30447 Human adipose tiss

ALIGNMENTS

RESULT 1
ABN59221 ID ABN59221 standard; DNA; 60 BP.
XX AC ABN59221;
AC AC
DT 15-JUL-2002 (first entry)
XX Human spliced transcript detection oligonucleotide SEQ ID NO:31969.
DE Human; mouse; rat; splice transcript; detection; RNA transcript;
XX splice variant; transcriptome; oligonucleotide library; ss.
KW Homo sapiens.
XX WO200210449-A2.
XX 07-FEB-2002.
XX 20-JUL-2001; 2001WO-IB001903.
XX 28-JUL-2000; 2000US-0221607P.
XX 02-MAY-2001; 2001US-0287724P.
XX (COMP-) COMPUGEN INC.
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.

XX Example 1; SEQ ID NO 31969; 47pp; English.
XX The present invention describes oligonucleotide libraries for detecting
XX messenger RNAs that populate a (sub-)transcriptome, where the (sub-
XX)transcriptome comprises messenger RNAs transcribed from multiple
XX transcription units that populate a genome. The library comprises several
XX oligonucleotides, each capable of hybridising selectively to a set of
XX messenger RNAs transcribed from a given transcription unit of the genome,
XX which encodes one or more messenger RNA splice variants. The
XX oligonucleotide libraries are useful for detecting mRNAs from a
XX biological sample, in expression profiling studies, in qualitatively or
XX quantitatively characterising the corresponding transcriptome, and in
XX detecting RNA transcripts and splice variants of human or animal
XX transcriptomes. The libraries may also be used as specialised mini
XX libraries to detect transcripts of a sub-transcriptome under a particular
XX biological or pathological state, and so allowing the detection of tissue
XX - and pathology-specific genes such as those genes only expressed in
XX specific tissue under a specific pathological condition; to detect
XX developmental specific genes; and to detect RNA transcripts and splice
XX variants of a transcriptome of a patient suffering from a particular
XX disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
XX rats, humans and mice, which are used in the exemplification of the
XX present invention. N.B. The sequence data for this patent did not form
XX part of the printed specification, but was obtained in electronic format
XX directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 60 BP; 17 A; 16 C; 18 G; 9 T; 0 U; 0 Other;
SQ Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2337 AAGAGGAGCTGAAGACCCACATCAGCAGGAGTACCTGGGAGTCTACTGTGCCATGC 2396
DB 1 AAGAGGAGCTGAAGACCCACATCAGCAGGAGTACCTGGGAGTCTACTGTGCCATGC 60
RESULT 2
ABN59222 ID ABN59222 standard; DNA; 60 BP.
XX AC ABN59222;
AC AC
DT 15-JUL-2002 (first entry)
XX Human spliced transcript detection oligonucleotide SEQ ID NO:31970.
DE Human; mouse; rat; splice transcript; detection; RNA transcript;
XX splice variant; transcriptome; oligonucleotide library; ss.
KW Homo sapiens.
XX WO200210449-A2.
XX 07-FEB-2002.
XX 20-JUL-2001; 2001WO-IB001903.
XX 28-JUL-2000; 2000US-0221607P.
XX 02-MAY-2001; 2001US-0287724P.
XX (COMP-) COMPUGEN INC.
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.

```

PS Example 1; SEQ ID NO 31970; 47pp; English.
XX
CC The present invention describes oligonucleotide libraries for detecting
CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-)
CC transcriptome comprises messenger RNAs transcribed from multiple
CC transcription units that populate a genome. The library comprises several
CC oligonucleotides, each capable of hybridising selectively to a set of
CC messenger RNAs transcribed from a given transcription unit of the genome,
CC which encodes one or more messenger RNA splice variants. The
CC oligonucleotide libraries are useful for detecting mRNAs from a
CC biological sample, in expression profiling studies, in qualitatively or
CC quantitatively characterising the corresponding transcriptome, and in
CC detecting RNA transcripts and splice variants of human or animal
CC transcriptomes. The libraries may also be used as specialised mini
CC libraries to detect transcripts of a sub-transcriptome under a particular
CC biological or pathological state, and so allowing the detection of tissue
CC - and pathology-specific genes such as those genes only expressed in
CC specific tissue under a specific pathological condition; to detect
CC developmental specific genes; and to detect RNA transcripts and splice
CC variants of a transcriptome of a patient suffering from a particular
CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC rats, humans and mice, which are used in the exemplification of the
CC present invention. N.B. The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 14 A; 12 C; 16 G; 18 T; 0 U; 0 Other;

Query Match      2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2564 TTCTCTGAGCTAGGAAGTCTACCGACATAGTCGAGGACTTTATGTTTTTGAGGC 2623
DB 1 TTCTCTGAGCTAGGAAGTCTACCGACATAGTCGAGGACTTTATGTTTTTGAGGC 60

RESULT 3
ABN59220
ID ABN59220 standard; DNA; 60 BP.
XX
AC ABN59220;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human spliced transcript detection oligonucleotide SEQ ID NO:31968.
XX
KW Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX
OS Homo sapiens.
XX
PN WO200210449-A2.
XX
PD 07-FEB-2002.
XX
PF 20-JUL-2001; 2001WO-IB001903.
XX
PR 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX
XX (COMP-) COMPUGEN INC.
XX
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX
XX New oligonucleotide libraries comprising oligonucleotides which
XX selectively hybridize to mRNAs transcribed from a transcription unit of a
XX genome, useful for detecting tissue-, pathology-, and developmental-
XX specific genes.
XX
PS Example 1; SEQ ID NO 31968; 47pp; English.

```

```

XX The present invention describes oligonucleotide libraries for detecting
XX messenger RNAs that populate a (sub-)transcriptome, where the (sub-)
XX transcriptome comprises messenger RNAs transcribed from multiple
XX transcription units that populate a genome. The library comprises several
XX oligonucleotides, each capable of hybridising selectively to a set of
XX messenger RNAs transcribed from a given transcription unit of the genome,
XX which encodes one or more messenger RNA splice variants. The
XX oligonucleotide libraries are useful for detecting mRNAs from a
XX biological sample, in expression profiling studies, in qualitatively or
XX quantitatively characterising the corresponding transcriptome, and in
XX detecting RNA transcripts and splice variants of human or animal
XX transcriptomes. The libraries may also be used as specialised mini
XX libraries to detect transcripts of a sub-transcriptome under a particular
XX biological or pathological state, and so allowing the detection of tissue
XX - and pathology-specific genes such as those genes only expressed in
XX specific tissue under a specific pathological condition; to detect
XX developmental specific genes; and to detect RNA transcripts and splice
XX variants of a transcriptome of a patient suffering from a particular
XX disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
XX rats, humans and mice, which are used in the exemplification of the
XX present invention. N.B. The sequence data for this patent did not form
XX part of the printed specification, but was obtained in electronic format
XX directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 22 A; 12 C; 15 G; 11 T; 0 U; 0 Other;

Query Match      2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 GCAAAACGAATCTTAGAGCTTGACCGAGTTAAGGGCAGGACAGGACAAAACGTTTCCAA 1051
DB 1 GCAAAACGAATCTTAGAGCTTGACCGAGTTAAGGGCAGGACAGGACAAAACGTTTCCAA 60

RESULT 4
ABN33255
ID ABN33255 standard; DNA; 60 BP.
XX
AC ABN33255;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human spliced transcript detection oligonucleotide SEQ ID NO:6003.
XX
KW Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX
OS Homo sapiens.
XX
PN WO200210449-A2.
XX
PD 07-FEB-2002.
XX
PF 20-JUL-2001; 2001WO-IB001903.
XX
PR 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX
XX (COMP-) COMPUGEN INC.
XX
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX
XX New oligonucleotide libraries comprising oligonucleotides which
XX selectively hybridize to mRNAs transcribed from a transcription unit of a
XX genome, useful for detecting tissue-, pathology-, and developmental-
XX specific genes.
XX
PS Example 1; SEQ ID NO 6003; 47pp; English.

```

CC The present invention describes oligonucleotide libraries for detecting
CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-
CC)transcriptome comprises messenger RNAs transcribed from multiple
CC transcription units that populate a genome. The library comprises several
CC oligonucleotides, each capable of hybridising selectively to a set of
CC messenger RNAs transcribed from a given transcription unit of the genome,
CC which encodes one or more messenger RNA splice variants. The
CC oligonucleotide libraries are useful for detecting mRNAs from a
CC biological sample, in expression profiling studies, in qualitatively or
CC quantitatively characterising the corresponding transcriptome, and in
CC detecting RNA transcripts and splice variants of human or animal
CC transcriptomes. The libraries may also be used as specialised mini
CC libraries to detect transcripts of a sub-transcriptome under a particular
CC biological or pathological state, and so allowing the detection of tissue
CC - and pathology-specific genes such as those genes only expressed in
CC specific tissue under a specific pathological condition; to detect
CC developmental specific genes; and to detect RNA transcripts and splice
CC variants of a transcriptome of a patient suffering from a particular
CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC rats, humans and mice, which are used in the exemplification of the
CC present invention. N.B. The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 14 A; 13 C; 20 G; 13 T; 0 U; 0 Other;

Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2119 GAACCTGGAGCCCTTGGCTTGGATTGATGGAGCCGGAACAGCAGCTGACATT 2178
DB 1 GAACCTGGAGCCCTTGGCTTGGATTGATGGAGCCGGAACAGCAGCTGACATT 60

RESULT 5
ADN59048
ID ADN59048 standard; DNA; 60 BP.
XX
AC ADN59048;
XX
XX
DT 15-JUL-2002 (first entry)
XX
DE Human spliced transcript detection oligonucleotide SEQ ID NO:31796.
XX
XX Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200210449-A2.
XX
XX 07-FEB-2002.
XX
XX 20-JUL-2001; 2001WO-18001903.
PF
XX
XX 28-JUL-2000; 2000US-0221607P.
PR
XX 02-MAY-2001; 2001US-0288724P.
XX
XX (COMP-) COMPUGEN INC.
PA
XX
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
PI
XX
XX WPI; 2002-257383/30.
DR
XX
XX New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.
XX
XX Example 1; SEQ ID NO 31796; 47pp; English.
PS
XX
XX The present invention describes oligonucleotide libraries for detecting

CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-
CC)transcriptome comprises messenger RNAs transcribed from multiple
CC transcription units that populate a genome. The library comprises several
CC oligonucleotides, each capable of hybridising selectively to a set of
CC messenger RNAs transcribed from a given transcription unit of the genome,
CC which encodes one or more messenger RNA splice variants. The
CC oligonucleotide libraries are useful for detecting mRNAs from a
CC biological sample, in expression profiling studies, in qualitatively or
CC quantitatively characterising the corresponding transcriptome, and in
CC detecting RNA transcripts and splice variants of human or animal
CC transcriptomes. The libraries may also be used as specialised mini
CC libraries to detect transcripts of a sub-transcriptome under a particular
CC biological or pathological state, and so allowing the detection of tissue
CC - and pathology-specific genes such as those genes only expressed in
CC specific tissue under a specific pathological condition; to detect
CC developmental specific genes; and to detect RNA transcripts and splice
CC variants of a transcriptome of a patient suffering from a particular
CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC rats, humans and mice, which are used in the exemplification of the
CC present invention. N.B. The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 14 A; 12 C; 16 G; 18 T; 0 U; 0 Other;

Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2564 TTCTCTCAGCTAGGAGAGTCTACCCGACATAGTCGAGGACATTTATGTTTGGAGC 2623
DB 1 TTCTCTCAGCTAGGAGAGTCTACCCGACATAGTCGAGGACATTTATGTTTGGAGC 60

RESULT 6
ADC22315
ID ADC22315 standard; DNA; 54 BP.
XX
XX ADC22315;
AC
XX
XX 18-DEC-2003 (first entry)
DT
XX
DE Nuclear localisation signal nucleotide sequence SEQ ID NO:164.
XX
XX recombinant fusion protein; fusion protein; binding; detection;
KW localisation domain; binding domain;
KW subcellular compartment localisation; gene; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003012068-A2.
PN
XX
XX 13-FEB-2003.
PD
XX
XX 01-AUG-2002; 2002WO-US024572.
PF
XX
XX 01-AUG-2001; 2001US-0309395P.
PR
XX 13-DEC-2001; 2001US-0341589P.
XX
XX (CELL-) CELLOMICS INC.
PA
XX
XX Bright G, Premkumar DR, Chen Y;
PI
XX
XX WPI; 2003-248174/24.
DR
XX P-PSDB; ADC22314.
DR
XX
XX New recombinant fusion protein comprising detection and first
PT localisation domains and a binding domain for the molecule of interest,
PT useful for detecting binding of a molecule of interest.
PT
XX
XX Claim 20; SEQ ID NO 164; 101pp; English.
PS
XX
XX The present invention describes a recombinant fusion protein (I) for

CC detecting binding of a molecule of interest. (I) comprises: (a) a
 CC detection domain; (b) a first localisation domain; and (c) a binding
 CC domain for the molecule of interest. The detection domain, the first
 CC localisation domain and the binding domain for the molecule of interest
 CC constituting the recombinant fusion protein for the molecule of interest
 CC molecule of interest are operably linked. The binding domain for the
 CC molecule of interest is separated from the first localisation domain by 0
 CC -20 amino acid residues. The first localisation domain and the binding
 CC domain for the molecule of interest both do not occur in a single non-
 CC recombinant protein with the same spacing as in the recombinant fusion
 CC protein for detecting binding of a molecule of interest. Also described:
 CC (1) a recombinant nucleic acid encoding the recombinant fusion protein;
 CC (2) a recombinant expression vector comprising the nucleic acid control
 CC sequences operably linked to the recombinant nucleic acid molecule; (3) a
 CC genetically engineered host cell transfected with the recombinant
 CC expression vector; (4) a kit for detecting binding of the molecule of
 CC interest; and (5) a method for identifying compounds that alter the
 CC binding of the molecule of interest. The recombinant fusion protein is
 CC useful for detecting binding of a molecule of interest. The recombinant
 CC fusion protein eliminates the need to construct two or more chimeric
 CC proteins and enables the monitoring of biochemical events in live, intact
 CC or fixed cells. The present sequence is used in the exemplification of
 CC the present invention.

SQ Sequence 54 BP; 25 A; 9 C; 13 G; 7 T; 0 U; 0 Other;

Query Match 2.0%; Score 54; DB 1; Length 54;
 Best Local Similarity 100.0%; Pred. No. 5.9;
 Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2270 AAAGTTACCAAGAGAAACACGATAATGAAGGTTCTCGAAGCAAAAGGCCCAAG 2323
 DB 1 AAAGTTACCAAGAGAAACACGATAATGAAGGTTCTCGAAGCAAAAGGCCCAAG 54

RESULT 7
 ABZ06784/C
 ID ABZ06784 standard; DNA; 50 BP.
 XX
 AC ABZ06784;
 XX
 DT 09-JAN-2003 (first entry)
 XX
 DE Human leukocyte gene expression profiling probe SEQ ID NO 6775.
 XX
 KW T7; leukocyte; gene expression profiling; allograft rejection;
 KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
 KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200257414-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 22-OCT-2001; 2001WO-US047856.
 XX
 PR 20-OCT-2000; 2000US-0241994P.
 PR 08-JUN-2001; 2001US-0296764P.
 XX
 PA (BIOC-) BIOCARDIA INC.
 XX
 PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
 PI Ly N, Woodward R, Quattermous T, Johnson F;
 XX
 DR WPI; 2002-636525/68.
 XX
 PT New system for leukocyte expression profiling, diagnosing a disease, or
 PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
 PT or congestive heart failure, comprises diagnostic oligonucleotides.
 XX
 PS Claim 1; Page 547; Opp; English.

XX The invention relates to a system for detecting gene expression, which
 CC comprises one or two isolated DNA molecules that detect expression of a
 CC gene, where the gene corresponds to any of 8143 oligonucleotides
 CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
 CC for leukocyte expression profiling. It is particularly useful for
 CC diagnosing a disease, monitoring (rate of) progression of a disease,
 CC predicting therapeutic outcome, determining prognosis for a patient,
 CC predicting disease complications in an individual or monitoring response
 CC to treatment in an individual. The diseases include cardiac allograft
 CC rejection, kidney allograft rejection, liver allograft rejection,
 CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
 CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
 XX
 SQ Sequence 50 BP; 10 A; 8 C; 15 G; 17 T; 0 U; 0 Other;
 Query Match 1.8%; Score 50; DB 1; Length 50;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1493 GCTCTCAAGCCTCTCCAAATAAAGCTCTATCGGAAACAATAATGAACCACT 1542
 DB 50 GCTCTCAAGCCTCTCCAAATAAAGCTCTATCGGAAACAATAATGAACCACT 1
 RESULT 8
 ABZ06394
 ID ABZ06394 standard; DNA; 50 BP.
 XX
 AC ABZ06394;
 XX
 DT 09-JAN-2003 (first entry)
 XX
 DE Human leukocyte gene expression profiling probe SEQ ID NO 6385.
 XX
 KW T7; leukocyte; gene expression profiling; allograft rejection;
 KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
 KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200257414-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 22-OCT-2001; 2001WO-US047856.
 XX
 PR 20-OCT-2000; 2000US-0241994P.
 PR 08-JUN-2001; 2001US-0296764P.
 XX
 PA (BIOC-) BIOCARDIA INC.
 XX
 PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
 PI Ly N, Woodward R, Quattermous T, Johnson F;
 XX
 DR WPI; 2002-636525/68.
 XX
 PT New system for leukocyte expression profiling, diagnosing a disease, or
 PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
 PT or congestive heart failure, comprises diagnostic oligonucleotides.
 XX
 PS Claim 1; Page 536; Opp; English.
 XX
 CC The invention relates to a system for detecting gene expression, which
 CC comprises one or two isolated DNA molecules that detect expression of a
 CC gene, where the gene corresponds to any of 8143 oligonucleotides
 CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
 CC for leukocyte expression profiling. It is particularly useful for
 CC diagnosing a disease, monitoring (rate of) progression of a disease,
 CC predicting therapeutic outcome, determining prognosis for a patient,
 CC predicting disease complications in an individual or monitoring response
 CC to treatment in an individual. The diseases include cardiac allograft

CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 17 A; 15 C; 8 G; 10 T; 0 U; 0 Other;
Query Match 1.8%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1493 GCTCTCAAGCCCTCTCCATAAAGCTCTATCGGGAACAAATGAACCACT 1542
Db 1 GCTCTCAAGCCCTCTCCATAAAGCTCTATCGGGAACAAATGAACCACT 50
RESULT 9
ADC17041
ID ADC17041 standard; DNA; 51 BP.
XX
AC ADC17041;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) region Seq ID143.
XX
KW sequence polymorphism analysis; human identity; human relatedness;
KW single nucleotide polymorphism; SNP; genetic disease; cytostatic;
KW immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
KW fatty acid metabolism; glycolysis; amino acid metabolism;
KW paternity analysis; forensic; autoimmune disease; cancer; nervous system;
KW infection; pathogenic microorganism; human; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT variation replace(26,G)
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
XX
PN WO200029622-A2.
XX
PD 25-MAY-2000.
XX
PF 17-NOV-1999; 99WO-US027283.
XX
PR 17-NOV-1998; 98US-0109024P.
PR 16-NOV-1999; 99US-00443199.
XX
PA (CURA-) CURAGEN CORP.
XX
XX Shinkets RA, Leach MD;
XX WPI; 2000-399731/34.
DR P-PSDB; ADC16824.
XX
PT Novel polynucleotide and polypeptide including one or more single
PT nucleotide polymorphisms, useful for diagnosing and treating conditions
PT associated with the presence of sequence polymorphism in humans and
PT animals.
XX
PS Claim 1; SEQ ID NO 143; 187pp; English.
XX
CC This invention relates to novel isolated nucleotide sequences which
CC comprise 217 defined polymorphic sequences. Sequence polymorphism-based
CC analysis of nucleic acid sequences can augment or replace previously
CC known methods for determining the identity and relatedness of
CC individuals. Single nucleotide polymorphisms (SNPs) tend to occur with
CC great frequency throughout the genome and may be located close to loci of
CC interest. Such variations can cause or be closely linked to pathological
CC conditions (genetic diseases). Hence the SNPs of the invention may be
CC useful in the development of compounds with cytostatic,
CC immunosuppressive, antiinflammatory, neuroprotective or antimicrobial
CC activities. Regulators of metabolic pathways such as fatty acid

CC metabolism, glycolysis, and amino acid metabolism may also be developed.
CC The compounds may be useful for treating a subject suffering from or at
CC risk for a pathology associated with the presence of a sequence
CC polymorphism. SNP detection is also useful in paternity analysis and
CC forensic application. Polymorphisms may contribute to the phenotype of an
CC organism and phenotypic traits include genetic diseases such as
CC autoimmune diseases, cancer, diseases of the nervous system and infection
CC by pathogenic microorganisms. The present sequence is the sequence
CC surrounding and including a human SNP of the invention.
XX
SQ Sequence 51 BP; 22 A; 6 C; 14 G; 9 T; 0 U; 0 Other;
Query Match 1.8%; Score 49.4; DB 1; Length 51;
Best Local Similarity 98.0%; Pred. No. 12;
Matches 50; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1618 CTATGGGAGTCGTCAGATTATCTCGGGAAGAGGAAACAGAGGCTTAAA 1668
Db 1 CTATGGGAGTCGTCAGATTATCTCGGGAAGAGGAAACAGAGGCTTAAA 51
RESULT 10
ADC17040
ID ADC17040 standard; DNA; 51 BP.
XX
AC ADC17040;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) region Seq ID142.
XX
KW sequence polymorphism analysis; human identity; human relatedness;
KW single nucleotide polymorphism; SNP; genetic disease; cytostatic;
KW immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
KW fatty acid metabolism; glycolysis; amino acid metabolism;
KW paternity analysis; forensic; autoimmune disease; cancer; nervous system;
KW infection; pathogenic microorganism; human; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT variation replace(26,C)
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
XX
PN WO200029622-A2.
XX
PD 25-MAY-2000.
XX
PF 17-NOV-1999; 99WO-US027283.
XX
PR 17-NOV-1998; 98US-0109024P.
PR 16-NOV-1999; 99US-00443199.
XX
PA (CURA-) CURAGEN CORP.
XX
XX Shinkets RA, Leach MD;
PI WPI; 2000-399731/34.
DR P-PSDB; ADC16823.
XX
PT Novel polynucleotide and polypeptide including one or more single
PT nucleotide polymorphisms, useful for diagnosing and treating conditions
PT associated with the presence of sequence polymorphism in humans and
PT animals.
XX
PS Claim 1; SEQ ID NO 142; 187pp; English.
XX
CC This invention relates to novel isolated nucleotide sequences which
CC comprise 217 defined polymorphic sequences. Sequence polymorphism-based
CC analysis of nucleic acid sequences can augment or replace previously
CC known methods for determining the identity and relatedness of
CC individuals. Single nucleotide polymorphisms (SNPs) tend to occur with


```
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2638 GTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTACTGCTGGAAT 2687
DB 1 GTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTACTGCTGGAAT 50

RESULT 13
ABZ00089
ID ABZ00089 standard; DNA; 50 BP.
XX
AC ABZ00089;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 80.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertemous T, Johnson F;
XX
WPI; 2002-636525/68.
XX
XX
XX New system for leukocyte expression profiling, diagnosing a disease, or
XX monitoring (the rate of) progression of a disease, e.g. atherosclerosis
XX or congestive heart failure, comprises diagnostic oligonucleotides.
XX
XX Claim 1; Page 330; 0pp; English.
XX
XX The invention relates to a system for detecting gene expression, which
XX comprises one or two isolated DNA molecules that detect expression of a
XX gene, where the gene corresponds to any of 8143 oligonucleotides
XX (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
XX for leukocyte expression profiling. It is particularly useful for
XX diagnosing a disease, monitoring (rate of) progression of a disease,
XX predicting therapeutic outcome, determining prognosis for a patient,
XX predicting disease complications in an individual or monitoring response
XX to treatment in an individual. The diseases include cardiac allograft
XX rejection, kidney allograft rejection, liver allograft rejection,
XX atherosclerosis, congestive heart failure, systemic lupus erythematosus,
XX rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 6 A; 14 C; 11 G; 19 T; 0 U; 0 Other;

Query Match 1.8%; Score 48.4; DB 1; Length 50;
Best Local Similarity 98.0%; Pred. No. 14;
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2629 GTTGCCATGTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTTTAC 2678
DB 1 GTTGCCATGTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTTTAC 50

RESULT 14
ADL33738/c
ID ADL33738 standard; DNA; 35 BP.
```

```
XX ADL33738;
AC
XX 03-JUN-2004 (first entry)
XX
XX LNA capture probe #1.
XX
XX Detection; isolation; locked nucleic acid; LNA; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "5' AQ2, where AQ is anthraquinone"
XX modified_base 16.35
XX /*tag= b
XX /mod_base= OTHER
XX /note= "Optionally LNA nucleotides"
XX
XX WO2004020575-A2.
XX
XX 11-MAR-2004.
XX
XX 20-JUN-2003; 2003WO-IB006354.
XX
XX 24-JUN-2002; 2002US-0390928P.
XX
XX (EXIQ-) EXIQON AS.
XX
XX Kauppinen S, Jacobsen N;
XX
XX WPI; 2004-315512/29.
XX
XX Detecting and/or isolating nucleic acid molecule having homopolymeric
XX sequence or repetitive element or conserved nucleotide sequence involves
XX treating sample containing nucleic acid compounds with locked nucleic
XX acid oligonucleotide.
XX
XX Claim 23; Page 67; 104pp; English.
XX
XX The present invention relates to a method (M1) for detecting and/or
XX isolating a nucleic acid having a homopolymeric sequence or repetitive
XX element or conserved nucleotide sequence. (M1) comprises treating a
XX sample containing nucleic acid compounds with an locked nucleic acid
XX (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
XX acid having the homopolymeric sequence or repetitive element or conserved
XX nucleotide sequence. (M1) is useful for detecting and isolating nucleic
XX acids released from a lysed complex biological mixture comprising nucleic
XX acids. The present sequence is a LNA capture probe, used to illustrate
XX the invention.
XX
XX Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
DB 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 15
AEA16041/c
ID AEA16041 standard; DNA; 35 BP.
XX
XX AEA16041;
XX
XX 28-JUL-2005 (first entry)
XX
XX Cy3-labeled polynucleotide modification PCR primer 2.
DE
```

```

XX KW PCR; primer; ss.
XX OS Unidentified.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Labeled with Cy3"
XX FT misc_difference 32. .35
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Linked to unidentified chemical group in
XX FT the absence of bases 32-35"
XX FT /tag= c
XX FT /note= "Optionally absent"
XX PN WO2005044836-A2.
XX PD 19-MAY-2005.
XX PF 05-NOV-2004; 2004WO-EP012556.
XX PR 05-NOV-2003; 2003DE-01051636.
XX PR 05-DEC-2003; 2003DE-01056837.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2005-372185/38.
XX CC This invention relates to novel conjugates comprising 1-100 nucleotide or
XX CC nucleoside molecules coupled to a label through water-soluble polymer
XX CC linkers. The conjugates of the invention may be useful for modifying
XX CC nucleic acid chains via coupling reactions catalyzed by DNA polymerase,
XX CC RNA polymerase or terminal transferase enzymes or by phosphoramidite
XX CC coupling, e.g. for labeling nucleic acids in arrays bound to a solid
XX CC phase. The current sequence is that of the Cy3-labeled polynucleotide
XX CC modification PCR primer 2 of the invention.
XX SQ Example 34B; Page 123; 212pp; German.
XX CC The invention relates to novel conjugates comprising 1-100 nucleotide or
XX CC nucleoside molecules coupled to a label through water-soluble polymer
XX CC linkers. The conjugates of the invention may be useful for modifying
XX CC nucleic acid chains via coupling reactions catalyzed by DNA polymerase,
XX CC RNA polymerase or terminal transferase enzymes or by phosphoramidite
XX CC coupling, e.g. for labeling nucleic acids in arrays bound to a solid
XX CC phase. The current sequence is that of the Cy3-labeled polynucleotide
XX CC modification PCR primer 2 of the invention.
XX SQ Query Match 1.3%; Score 35; DB 1; Length 35;
XX Best Local Similarity 100.0%; Pred. No. 95;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX DB 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX RESULT 16
XX AEE86826/c
XX ID AEE86826 standard; DNA; 35 BP.
XX AC AEE86826;
XX CC 23-FEB-2006 (first entry)
XX DT Novel solid phase-related oligonucleotide Oligo dT35-Cy3 #1.
XX DE DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX KW

```

```

XX OS Synthetic.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX PN DE102004025746-A1.
XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025746.
XX PR 26-MAY-2004; 2004DE-10025746.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PI Cherkasov D, Hennig C, Baeuml E;
XX DR WPI; 2006-040183/05.
XX CC Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX CC -matrix extension, using a solid phase with reduced non-specific binding
XX CC of labeled components.
XX PS Example 8; Page 92; 144pp; German.
XX CC This invention relates to a novel method for parallel sequence analysis
XX CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX CC The SP is useful for multiple parallel sequencing of nucleic acids and
XX CC shows reduced non-specific binding of labeled or unlabeled nucleotides
XX CC and nucleic acids, so the background remains low even after prolonged and
XX CC repeated contact of the solid phase with high concentrations of labeled
XX CC reagents. The present sequence is that of an oligonucleotide which was
XX CC used in the development of the novel method of the invention.
XX SQ Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;
XX Query Match 1.3%; Score 35; DB 1; Length 35;
XX Best Local Similarity 100.0%; Pred. No. 95;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX DB 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX RESULT 17
XX AEF94731/c
XX ID AEF94731 standard; DNA; 35 BP.
XX AC AEF94731;
XX CC 20-APR-2006 (first entry)
XX DT Optical DNA analysis process-related oligonucleotide dT35-Cy3.
XX DE ss; dna detection; DNA sequencing; DNA amplification; oligo dT35-Cy3.
XX KW Unidentified.
XX OS Synthetic.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= b
XX FT /mod_base= 5'-Cy3
XX PN DE102004025696-A1.
XX

```


CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 39 BP; 0 A; 0 C; 0 G; 38 T; 1 U; 0 Other;
 Query Match 1.3%; Score 35; DB 1; Length 39;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 39 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5

RESULT 20
 AAQ25031/c
 ID AAQ25031 standard; DNA; 40 BP.

XX AAQ25031;
 XX 13-JUL-1992 (first entry)

XX Oligonucleotide specific for HIV proviral DNA.

XX HIV; thiolation; reverse transcriptase; primer; inhibition; homooligomer;
 XX ss.

XX Synthetic.

XX WO9203127-A.

XX 05-MAR-1992.

XX 15-AUG-1991; 91WO-US005919.

XX 16-AUG-1990; 90US-00568131.

XX (UYNV-) RES FOUND UNIV NEW.

XX Bardos TJ, Ho YK, Aradi J, Schinazi RF;

XX WPI; 1992-096567/12.

XX Compns. contg. 5-thiolated (oligo-poly-) -nucleotide(s) - for treating HIV
 PT infection, AIDS and for preventing HIV-1 infection.

XX Disclosure; Page 11; 42pp; English.

XX The oligomer comprises a non-thiolated (binding) homooligonucleotide
 CC region (d(T)12) to promote the binding of the remaining portion of the
 CC 5-thiolated oligonucleotide (MdU 28) to a homopurine site of the viral
 CC genome via triple-helix formations. The oligo is used to in the treatment
 CC of HIV. See also AAQ22624-27 and AAQ25017-Q25032

XX Sequence 40 BP; 0 A; 0 C; 0 G; 12 T; 28 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 21
 AAA39649/c
 ID AAA39649 standard; DNA; 40 BP.

XX AAA39649;

XX 11-SEP-2000 (first entry)

XX

DE Primer used in construction of hybrid CAT RNA.

XX Control element; translation enhancer; pestivirus homology box IV;

KW immune response; viral infection; primer; ss.

XX Unidentified.

XX US6057093-A.

XX 02-MAY-2000.

XX 12-MAY-1995; 95US-00439996.

XX 28-SEP-1992; 92US-00952799.

XX 28-SEP-1993; 93US-00128583.

XX (CHIR) CHIRON CORP.

XX Han JH, Spaete RR, Suh BS, Selby MJ, Houghton M, Yoo BJ;

XX WPI; 2000-338599/29.

XX Enhancing translation of coding region of hepatitis C virus involves
 PT making RNA molecule comprising the coding region and 5' untranslated
 PT region comprising a sequence fully homologous to pestivirus homology box
 PT IV.

XX Disclosure; Col 19-20; 16pp; English.

XX This invention describes a novel method for enhancing translation of a
 CC coding region which involves making an RNA molecule, comprising the
 CC coding region operably linked to a 5' untranslated region (UTR)
 CC comprising a sequence fully homologous to pestivirus homology box IV, and
 CC then translating it so that the translation of the coding region is
 CC enhanced. The method is useful for enhancing or controlling the
 CC translation of HCV nucleic acid, which allows stronger immune responses,
 CC where blocking or decreasing translation of viral nucleic acid may
 CC decrease the pathology of viral infection. This sequence represents a
 CC primer which is used in the construction of hybrid CAT RNA's described in
 CC the method of the invention

XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 22

ADH56159/c

ID ADH56159 standard; DNA; 40 BP.

XX ADH56159;

XX 25-MAR-2004 (first entry)

XX Oligonucleotide probe SEQ ID NO:1.

XX probe support; nucleic probe region; probe; probe support analysis;

XX TOF-SIMS analysis; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "5' HS-(CH2)6-O-PO2-O-T"

```

XX WO2004003531-A1.
XX
XX 08-JAN-2004.
XX
XX 26-JUN-2003; 2003WO-JP08092.
XX
XX 28-JUN-2002; 2002JP-00191533.
XX
XX (CANO ) CANON KK.
XX
XX Takase H, Okamoto T, Aiba T, Hashimoto H;
XX WPI; 2004-083158/08.
XX
XX Probe support contains nucleic probe region having nucleic probes fixed
XX therein and enables accurate analysis of probes using TOP-SIMS.
XX
XX Example 5; SEQ ID NO 1; 59pp; Japanese.
XX
XX The present invention describes a probe support containing a nucleic
XX probe region having nucleic probes fixed to it. Also described is a probe
XX support analysis method. The probe support can be used for the TOP-SIMS
XX analysis of nucleic acid probes by forming a phosphorus-containing region
XX usable as a standard on a substrate, nucleic probes located as a matrix
XX on a nucleic acid chip substrate can be accurately and quantitatively
XX analysed. The support enables accurate analysis. The present sequence
XX represents a probe which is used in an example from the present
XX invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
RESULT 23
ADH76858/c
ID ADH76858 standard; DNA; 40 BP.
XX
XX ADH76858;
XX
XX 22-APR-2004 (first entry)
XX
XX Probe related to the invention, SEQ ID 9.
XX
XX DNA microarray; gene analysis; disease diagnosis; species identification;
XX probe; ss.
XX
XX Synthetic.
XX
XX WO2004001412-A1.
XX
XX 31-DEC-2003.
XX
XX 23-JUN-2003; 2003WO-JP007918.
XX
XX 24-JUN-2002; 2002JP-00183249.
XX
XX 28-JUN-2002; 2002JP-00191390.
XX
XX (CANO ) CANON KK.
XX
XX Kawaguchi M, Okamoto T, Takase H, Hashimoto H;
XX WPI; 2004-099140/10.
XX
XX DNA microarrays having standard probes for detecting target nucleic acid
XX molecules in specimens, applicable in gene analysis, disease diagnosis
PT and species identification.
XX Example 10; SEQ ID NO 9; 52pp; Japanese.
XX
XX The invention relates to a DNA microarray for detecting a target nucleic
XX acid molecule in a specimen, comprising a nucleic acid probe that has a
XX base sequence substantially complementary to the base sequence of the
XX target nucleic acid molecule immobilised onto a substrate. The
XX microarrays are applicable in gene analysis, disease diagnosis and
XX species identification. With such reliable microarrays, the detection of
XX target nucleic acid molecules can be conveniently and quickly achieved,
XX with high accuracy and improved reproducibility and quantitation even in
XX a high-throughput system. In the microarray with a matrix shape, it is
XX possible to show images of distribution of formation density of a
XX nucleic acid probe-dot system. Various internal and external-standard
XX probes were prepared biologically by enzyme digestion or cleavage, and
XX synthetically, for immobilisation onto a glass substrate e.g. after
XX screen-printing at defined density distribution in a pattern. The current
XX sequence represents a probe related to the invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
RESULT 24
ADK70561/c
ID ADK70561 standard; DNA; 40 BP.
XX
XX ADK70561;
XX
XX 06-MAY-2004 (first entry)
XX
XX Nucleic acid sequence detection-related oligonucleotide SeqID1.
XX
XX nucleic acid base sequence detection; target nucleic acid; annealing;
XX hybrid; dideoxy nucleotide triphosphate; deoxynucleotide triphosphate;
XX mass spectrometry; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= Bound to O-PO2-(CH2)6-SH"
XX
XX JP2004033043-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00191520.
XX
XX 28-JUN-2002; 2002JP-00191520.
XX
XX (CANO ) CANON KK.
XX
XX WPI; 2004-218622/21.
XX
XX Detecting nucleic acid base sequence by fixing primer on board partial
XX structure cut by light with in 5' side of primer, adding target nucleic
XX acid as template, performing PCR, analyzing sequence based molecular
XX weight.
XX
XX Example 1; SEQ ID NO 1; 23pp; Japanese.
XX
XX This invention relates to a novel method of detecting a nucleic acid base

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CC sequence, which comprises fixing on board a partial structure cut by
 CC light within the 5' side of primer, adding a target nucleic acid as a
 CC template, performing annealing to form a hybrid, extending the hybrid
 CC using four sorts of dideoxy nucleotide triphosphate, deoxynucleotide
 CC triphosphate, removing the template, irradiating with light and analysing
 CC the sequence of extension part based molecular weight obtained by mass
 CC spectrometry. The invention is useful for determining the base sequence
 CC of a number of nucleic acids effectively and efficiently in a short time.
 CC The present sequence is that of an oligonucleotide which was used in the
 CC exemplification of the invention.

XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 25

ID ADK67293/c
 XX ADK67293 standard; RNA; 40 BP.

AC ADK67293;

DT 06-MAY-2004 (first entry)

DE RNA sequence target of novel nucleic acid detection method SeqID 1.

XX DNA probe carrier; secondary ion mass spectroscopy time of flight; ss;
 KW nucleic acid detection.

XX Synthetic.

FT Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= HS-(CH2)6-O-PO2-O, optionally absent"

XX JP2004024203-A.

XX 29-JAN-2004.

XX 28-JUN-2002; 2002JP-00189838.

XX 28-JUN-2002; 2002JP-00189838.

XX (CANO) CANON KK.

XX WPI; 2004-127107/13.

XX Analysis of target nucleic acid e.g., RNA or DNA, by making sample react
 PT with probe carrier having probes complementary to target and detecting
 PT the hybrid by time-of-flight type secondary ion mass spectrometry.

XX Example 2; SEQ ID NO 2; 1lpp; Japanese.

XX This invention relates to a novel analytical method to target nucleic
 CC acid molecules in a sample. Specifically, it refers to a DNA probe
 CC carrier that has two or more types of probe that are complementary to the
 CC base sequence of the target RNA molecule such that the hybrid structure
 CC can subsequently be identified by secondary ion mass spectroscopy time of
 CC flight. The present invention describes a method that overcomes the
 CC problems associated with using radioactive isotopes or fluorescence to
 CC identify the nucleic acid molecules of interest. Accordingly, this method
 CC provides a means for the acquisition of accurate gene information. This
 CC oligonucleotide sequence is a target RNA sequence of the invention.

XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 0 T; 40 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 26

ID ADK67292
 XX ADK67292 standard; DNA; 40 BP.

AC ADK67292;

DT 06-MAY-2004 (first entry)

DE DNA probe used for nucleic acid detection method SeqID 1.

XX DNA probe carrier; secondary ion mass spectroscopy time of flight; ss;
 KW nucleic acid detection.

XX Synthetic.

FT Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= HS-(CH2)6-O-PO2-O, optionally absent"

XX JP2004024203-A.

XX 29-JAN-2004.

XX 28-JUN-2002; 2002JP-00189838.

XX 28-JUN-2002; 2002JP-00189838.

XX (CANO) CANON KK.

XX WPI; 2004-127107/13.

XX Analysis of target nucleic acid e.g., RNA or DNA, by making sample react
 PT with probe carrier having probes complementary to target and detecting
 PT the hybrid by time-of-flight type secondary ion mass spectrometry.

XX Example 1; SEQ ID NO 1; 1lpp; Japanese.

XX This invention relates to a novel analytical method to target nucleic
 CC acid molecules in a sample. Specifically, it refers to a DNA probe
 CC carrier that has two or more types of probe that are complementary to the
 CC base sequence of the target RNA molecule such that the hybrid structure
 CC can subsequently be identified by secondary ion mass spectroscopy time of
 CC flight. The present invention describes a method that overcomes the
 CC problems associated with using radioactive isotopes or fluorescence to
 CC identify the nucleic acid molecules of interest. Accordingly, this method
 CC provides a means for the acquisition of accurate gene information. This
 CC oligonucleotide sequence is a DNA probe of the invention.

XX SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 Db . 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 27

ADJ71299/c


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ID ADJ71299 standard; DNA; 40 BP.
XX
AC ADJ71299;
XX
DT 06-MAY-2004 (first entry)
XX
DE Method of analysing substance using mass spectrometry probe #1.
XX
KW ss; probe; mass spectrometry; MALDI-TOF MS; light.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "modified by HS-(CH2)6-O-PO-O"
XX
XX W02004003539-A1.
XX
XX 08-JAN-2004.
XX
XX 27-JUN-2003; 2003W0-JP008197.
XX
XX 28-JUN-2002; 2002JP-00191535.
XX
XX (CANO ) CANON KK.
XX
XX Okamoto T;
XX
XX WPI; 2004-203386/19.
XX
XX Acquiring mass of immobilized substance, using mass spectrometry, by
XX fixing substance to substrate using partial structure to be disconnected
XX by light in bonded part, analyzing mass spectrum of substance after
XX disconnecting structure.
XX
XX Example 1; Page 47; 81pp; English.
XX
XX The present invention relates to a method of analysing a substance on a
XX substrate using mass spectrometry (MALDI-TOF MS). The method involves
XX using a structure including a partial structure to be disconnected by
XX light to fix the substance on the substrate, irradiating the substance
XX fixed to the substrate with light for inducing the disconnection of the
XX partial structure to be disconnected by light, and analysing the mass
XX spectrum of the substance which is brought in an unfixed state by
XX disconnecting the partial structure by the irradiation of light. The
XX method can be used to acquire data from a bio-chip. The present sequence
XX is a probe used to demonstrate the method of the invention.
XX
SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 28
ADL71382/c
ID ADL71382 standard; DNA; 40 BP.
XX
AC ADL71382;
XX
XX 20-MAY-2004 (first entry)
XX
XX Labelled DNA oligonucleotide probe SeqID 1.
XX
XX nucleic acid chip substrate; probe; matrix;
XX environment-control type scanning electron microscope; ss.
XX

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XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= HS-(CH2)6-O-PO2-O label"
XX
XX JP2004037112-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX (CANO ) CANON KK.
XX
XX WPI; 2004-185125/18.
XX
XX Nucleic acid chip substrate, comprising nucleic acid probe and related
XX nucleic acid substances arranged in matrix form on substrate surface.
XX
XX Example 1; SEQ ID NO 1; 17pp; Japanese.
XX
XX This invention relates to a novel method for developing nucleic acid chip
XX substrates. Specifically, it refers to a chip that comprises a nucleic
XX acid probe and related nucleic acid substances arranged in a matrix form
XX on the chip substrate surface. The present invention describes observing
XX binding to the nucleic acid probe by an environment-control type scanning
XX electron microscope and determining the quality of the dot shape
XX produced. This oligonucleotide sequence is a DNA probe of the invention.
XX
XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 29
ADL71383
ID ADL71383 standard; DNA; 40 BP.
XX
AC ADL71383;
XX
XX 20-MAY-2004 (first entry)
XX
XX Labelled DNA oligonucleotide probe SeqID 2.
XX
XX nucleic acid chip substrate; probe; matrix;
XX environment-control type scanning electron microscope; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= HS-(CH2)6-O-PO2-O label"
XX
XX JP2004037112-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX

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XX PA (CANO ) CANON KK.
XX WPI; 2004-185125/18.
XX Nucleic acid chip substrate, comprising nucleic acid probe and related
XX nucleic acid substances arranged in matrix form on substrate surface.
XX Example 3; SEQ ID NO 2; 17pp; Japanese.
XX This invention relates to a novel method for developing nucleic acid chip
XX substrates. Specifically, it refers to a chip that comprises a nucleic
XX acid probe and related nucleic acid substances arranged in a matrix form
XX on the chip substrate surface. The present invention describes observing
XX binding to the nucleic acid probe by an environment-control type scanning
XX electron microscope and determining the quality of the dot shape
XX produced. This oligonucleotide sequence is a DNA probe of the invention.
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35
RESULT 30
ADL78812/c
ID ADL78812 standard; DNA; 40 BP.
XX AC ADL78812;
XX 20-MAY-2004 (first entry)
XX Labelled DNA oligonucleotide probe SeqID 1.
XX organic device; manufacturing; X-ray source; probe; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= HS- (CH2)6-O-PO2-O 5' label"
XX JP2004037108-A.
XX 05-FEB-2004.
XX 28-JUN-2002; 2002JP-00190830.
XX 28-JUN-2002; 2002JP-00190830.
XX (CANO ) CANON KK.
XX WPI; 2004-139693/14.
XX Testing surface state of organic device in manufacturing organic device
XX has organic film containing organic compound having sample holding base.
XX Example 1; SEQ ID NO 1; 10pp; Japanese.
XX This invention relates to a novel method for testing the surface state of
XX an organic device used in manufacturing. Specifically, it refers to an
XX organic film containing an organic compound, which has a sample holding
XX base (SB) that can be detected by using an X-ray source to centre on and
XX measure the position of the sample holding base by identifying the
XX specific angle of reflection. The present invention describes an organic
XX film that contains a number of bio-related substances such as a biochip

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```

CC arranged in matrix form on the substrate. In the manufacturing process,
CC the laminated film of the biochip can be analysed repeatedly in a high
CC throughput manner. This oligonucleotide sequence is a labelled DNA probe
CC used in an exemplification of the invention.
XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

```

```

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

```

```

RESULT 31
ADM16960/c
ID ADM16960 standard; DNA; 40 BP.
XX AC ADM16960;
XX 03-JUN-2004 (first entry)
XX Probe immobilised substrate method associated DNA probe #26.
XX Probe immobilised substrate; surface analysis method;
XX scanning electron microscopy; atomic force microscopy;
XX time-of-flight secondary ion mass spectrometry; TOP-SIMS; probe array;
XX genome analysis; gene expression analysis; cancer; hereditary disease;
XX infectious disease; photoelectron spectroscopy; probe; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "Modified by thiol (SH) group"
XX US2004053308-A1.
XX 18-MAR-2004.
XX 18-JUN-2003; 2003US-00463549.
XX 28-JUN-2002; 2002JP-00189836.
XX 28-JUN-2002; 2002JP-00190009.
XX (CANO ) CANON KK.
XX Nakamura K;
XX WPI; 2004-338612/31.
XX Probe immobilized substrate e.g. for DNA probe, has colored metal or
XX metal compound provided at prescribed spots for locating probe spots.
XX Example 7; SEQ ID NO 26; 30pp; English.
XX The present invention relates to a probe immobilised substrate and a
XX method for its manufacture. The probes can be located using a surface
XX analysis method e.g. scanning electron microscopy, atomic force
XX microscopy, and time-of-flight secondary ion mass spectrometry (TOP-SIMS)
XX method. The invention also discloses a method for analysing the probe
XX array, and a method for detecting the probe and target material. The
XX invention is useful for probe immobilised substrates such as DNA probes
XX such as single strand DNA probes, single strand RNA probes, single strand
XX peptide nucleic acid (PNA) probes, protein probes for genome analysis and
XX gene expression analysis for diagnosis of cancer, hereditary disease,
XX life-style disease, infectious disease, forecast of prognosis and
XX determination of therapeutic strategies, using electron microscopy,
XX photoelectron spectroscopy, atomic force microscopy, and TOP-SIMS. The

```

CC invention reduces the time for searching the positions of probe array
 CC spots, hence reliable images are obtained quickly, thereby enabling
 CC efficient and accurate analysis, at low cost. The present sequence
 CC represents a DNA probe used in the exemplification of the present
 CC invention.

XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
 SQ
 Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 ||||||||||||||||||||||||||||||||||||||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 32
 ADN35256/c
 ID ADN35256 standard; DNA; 40 BP.
 XX AC ADN35256;
 XX DT 01-JUL-2004 (first entry)
 XX Probe sequence used for hybridization tests #1.
 DE secondary-ion mass spectrometry; gene analysis; disease diagnosis;
 XX species identification; ss; probe.
 KW Synthetic.
 OS WO2004003532-A1.
 PN 08-JAN-2004.
 PD 26-JUN-2003; 2003WO-JP008104.
 XX 28-JUN-2002; 2002JP-00190010.
 PR 28-JUN-2002; 2002JP-00191391.
 PR 28-JUN-2002; 2002JP-00191414.
 XX (CANO) CANON KK.
 XX Okamoto T, Takase H, Hashimoto H;
 PI WPI; 2004-203385/19.
 XX Analysis of probe supports or nucleic acids on nucleic acid chips by
 PT halogen-based time-of-flight secondary-ion mass spectrometry, applicable
 PT in gene analysis, disease diagnosis and species identification.
 XX Example; SEQ ID NO 1; 68pp; Japanese.

XX The present invention relates to detecting a probe located and/or a
 CC target capable of binding specifically to the probe on a substrate
 CC comprises the preparation of a substrate with the probe and/or the target
 CC for specific binding to the probe located on its surface, and measurement
 CC of the substrate surface by time- of-flight secondary-ion mass
 CC spectrometry with labeling. The method is for analyzing probe supports or
 CC nucleic acids on nucleic acid chips with detection and quantitation of
 CC probe conditions and hybrid of probe with target nucleic acid, which is
 CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
 SQ

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
 ||||||||||||||||||||||||||||||||||||||||

RESULT 33
 ADN35263/c
 ID ADN35263 standard; DNA; 40 BP.
 XX AC ADN35263;
 XX DT 01-JUL-2004 (first entry)
 XX Probe sequence used for hybridization tests #5.
 DE secondary-ion mass spectrometry; gene analysis; disease diagnosis;
 XX species identification; ss; probe.
 KW Synthetic.
 OS WO2004003532-A1.
 PN 08-JAN-2004.
 PD 26-JUN-2003; 2003WO-JP008104.
 XX 28-JUN-2002; 2002JP-00190010.
 PR 28-JUN-2002; 2002JP-00191391.
 PR 28-JUN-2002; 2002JP-00191414.
 XX (CANO) CANON KK.
 XX Okamoto T, Takase H, Hashimoto H;
 PI WPI; 2004-203385/19.
 XX Analysis of probe supports or nucleic acids on nucleic acid chips by
 PT halogen-based time-of-flight secondary-ion mass spectrometry, applicable
 PT in gene analysis, disease diagnosis and species identification.
 XX Example; SEQ ID NO 8; 68pp; Japanese.

XX The present invention relates to detecting a probe located and/or a
 CC target capable of binding specifically to the probe on a substrate
 CC comprises the preparation of a substrate with the probe and/or the target
 CC for specific binding to the probe located on its surface, and measurement
 CC of the substrate surface by time- of-flight secondary-ion mass
 CC spectrometry with labeling. The method is for analyzing probe supports or
 CC nucleic acids on nucleic acid chips with detection and quantitation of
 CC probe conditions and hybrid of probe with target nucleic acid, which is
 CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 40 BP; 0 A; 0 C; 0 G; 35 T; 5 U; 0 Other;
 SQ

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 ||||||||||||||||||||||||||||||||||||||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 34
 ADN35257
 ID ADN35257 standard; DNA; 40 BP.
 XX AC ADN35257;
 XX DT 01-JUL-2004 (first entry)
 XX Target sequence of the invention #1.


```

PS Example; SEQ ID NO 10; 68pp; Japanese.
XX
CC The present invention relates to detecting a probe located and/or a
CC target capable of binding specifically to the probe on a substrate
CC comprises the preparation of a substrate with the probe and/or the target
CC for specific binding to the probe located on its surface, and measurement
CC of the substrate surface by time- of-flight secondary-ion mass
CC spectrometry with labeling. The method is for analyzing probe supports or
CC nucleic acids on nucleic acid chips with detection and quantitation of
CC probe conditions and hybrid of probe with target nucleic acid, which is
CC applicable in gene analysis, disease diagnosis and species
CC identification. The present sequence represents a target sequence used
CC for hybridization tests.
XX
SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 37
AED51679
ID AED51679 standard; DNA; 40 BP.
XX
AC AED51679;
XX
XX 29-DEC-2005 (first entry)
XX
XX Modified nucleic acid used in intermolecular interaction measurement #2.
XX
XX Intermolecular interaction; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "HS-(CH2)6-O-PO2-O-Adenine"
XX
XX JP2005283433-A.
XX
XX 13-OCT-2005.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX (CANO ) CANON KK.
XX
XX Takada K;
XX
XX WPI; 2005-708750/73.
XX
XX Probe for measuring device of intermolecular interaction of organic
XX molecule, comprises probe portion coated with electroconductive film and
XX organic film.
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).

```

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CC Probes of the invention enable stable measurement of organic molecules
CC fixed on substrate by a simple structure. The current sequence represents
CC a nucleic acid sequence used in an example of the invention.
XX
SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 38
AED51678/c
ID AED51678 standard; DNA; 40 BP.
XX
AC AED51678;
XX
XX 29-DEC-2005 (first entry)
XX
XX Modified nucleic acid used in intermolecular interaction measurement #1.
XX
XX Intermolecular interaction; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "HS-(CH2)6-O-PO2-O-Thymine"
XX
XX JP2005283433-A.
XX
XX 13-OCT-2005.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX (CANO ) CANON KK.
XX
XX Takada K;
XX
XX WPI; 2005-708750/73.
XX
XX Probe for measuring device of intermolecular interaction of organic
XX molecule, comprises probe portion coated with electroconductive film and
XX organic film.
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).
XX
XX Probes of the invention enable stable measurement of organic molecules
XX fixed on substrate by a simple structure. The current sequence represents
XX a nucleic acid sequence used in an example of the invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match          1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 39
AED68744
ID AED68744 standard; DNA; 40 BP.
AC AED68744;
XX
DT 12-JAN-2006 (first entry)
XX
DE 40mer poly-A detecting DNA probe.
XX
KW DNA detection; hybridization; diagnosis; infection; antimicrobial;
KW biochip; ss; probe.
XX
OS Unidentified.
XX
PN WO2005103695-A1.
XX
PD 03-NOV-2005.
XX
PF 25-APR-2005; 2005WO-JP008374.
XX
PR 23-APR-2004; 2004JP-00128940.
XX
PA (MATU ) MATSUSHITA ELECTRIC IND CO LTD.
PA (MICR-) MICROTEC CO LTD.
PI Maeda M, Akimoto K, Hori J, Murayama R, Tabata J, Bando K;
XX WPI; 2005-769097/78.
XX
PT Detecting target gene with specific sequence by adding intercalator to
PT double-stranded nucleic acid formed by adding sample having single-
PT stranded target, to probe, performing photo irradiation and detecting
PT intercalator bound nucleic acid.
XX
PS Example 2; SEQ ID NO 3; 35pp; Japanese.
XX
CC The new invention relates to a method for detecting (M1) a target gene
CC having a specific sequence in a specimen, by adding a single-stranded
CC sample, to an electrode with an immobilized probe comprising a
CC complementary sequence of the target, therefore forming double-stranded
CC nucleic acid by hybridization, adding intercalator, carrying out photo
CC irradiation such that intercalator binds with double-stranded nucleic
CC acid and detecting intercalator bound nucleic acid. Also claimed are a
CC gene detector, which detects a gene having a specific sequence, in a
CC specimen. In (M1), the electrochemical measurement applies voltage with
CC respect to the electrode, and the electrochemical light-emission quantity
CC by the double-stranded nucleic acid is covalently bonded with the
CC intercalating agent, is measured. The intercalating agent is specifically
CC inserted in the double-stranded nucleic acid, where the intercalating
CC agent includes a compound which has the double-stranded nucleic acid
CC binding region which covalently binds the double-stranded nucleic acid
CC light irradiation, the electrochemical active site which has
CC electrochemical activity, and the connection region which connects the
CC double-stranded nucleic acid binding region and the electrochemical
CC active site. (M1) is useful in gene diagnosis and/or infectious disease
CC diagnosis. The new sequence is a 40mer poly-A detecting DNA probe.
XX
SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

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RESULT 40
AEF24436
ID AEF24436 standard; DNA; 40 BP.
XX
AC AEF24436;
XX
DT 09-MAR-2006 (first entry)
XX
DE 40mer poly A DNA sequence.
XX
KW DNA detection; diagnosis; infection; antimicrobial; drug discovery; ss.
XX
OS Unidentified.
XX
PN WO2006003991-A1.
XX
PD 12-JAN-2006.
XX
PF 30-JUN-2005; 2005WO-JP012080.
XX
PR 06-JUL-2004; 2004JP-00199157.
XX
PA (MATU ) MATSUSHITA ELECTRIC IND CO LTD.
XX
PI Hori J, Murayama R, Tabata J, Bando K, Egashira N;
XX WPI; 2006-090483/09.

```

Gene detection method for detecting genes having specific sequences, involves adding sample to electrode having probe, hybridizing sample and probe, adding intercalating agent, performing light irradiation and detecting agents forming bonds.

Example 1; Page 25; 40pp; Japanese.

The new invention relates to a gene detection method. Specifically described is a method of detecting genes having specific sequences, by denaturing a sample, immobilizing single stranded probes on an electrode, adding sample to the electrode, hybridizing the sample with the probe to form a double stranded nucleic acid, adding an intercalating agent to electrode, carrying out light irradiation for covalent bonds forming between nucleic acid and agent and detecting agent forming a covalent bond by electrochemical measurement. Also described is the intercalating agent comprising a compound of formula Fa-La-Ia (1) having substituent(s) comprising compounds represented by -Ib-Ib and -Lc-Pb at each of the sites, where Fa and Pb are electrochemically active site having an electrochemical activity, Ia and Ib are double stranded nucleic acid binding site which is to be inserted specifically into the double stranded nucleic acid and is capable of forming a covalent bond with the double stranded nucleic acid upon light irradiation, and La, Ib and Lc are linking sites that links the double stranded nucleic acid binding site to the electrochemically active site. In (M1), the Fa and Pb, and Ia and Ib are respectively the same compounds. The detection process comprises applying a voltage with respect to the electrode, and measuring the electrochemical light-emission quantity by the covalent bonded double stranded nucleic acid and intercalating agent. The compound that has photosensitivity is a furcoumarin derivative, preferably a psoralen derivative. (M1) is useful in gene diagnosis, infectious diseases diagnosis and genome based drug discovery. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences. The present sequence is a 40-mer poly A DNA sequence related to the invention.

Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

Tue Nov 7 10:41:34 2006

ngs.res

```
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 41
AEF05826
ID AEF05826 standard; DNA; 40 BP.
XX
XX
AC AEF05826;
XX
XX 23-MAR-2006 (first entry)
XX
XX PolYA target sequence, SEQ ID NO:3.
XX
XX DNA detection; hybridization; probe; ss.
XX
XX Synthetic.
XX
XX JP2006020525-A.
XX
XX 26-JAN-2006.
XX
XX 06-JUL-2004; 2004JP-00199156.
XX
XX 06-JUL-2004; 2004JP-00199156.
XX
XX (MATU ) MATSUSHITA DENKI SANGYO KK.
XX
XX Horii J, Murayama R, Tabata N, Bando K, Egashira N;
XX
XX WPI; 2006-113221/12.
XX
XX Detecting gene with specific sequence, by denaturing gene sample into
XX single-stranded molecule, reacting single-stranded nucleic acid with
XX nucleic acid probe immobilized on electrode, and electrochemically
XX detecting bound nucleic acid.
XX
XX Example 1; SEQ ID NO 3; 15pp; Japanese.
XX
XX The invention relates to a method for detecting a gene with a specific
XX sequence. The method involves: (a) hybridizing a target nucleic acid to a
XX probe immobilized on an electrode; (b) contacting the resulting duplex
XX with a photoactivatable intercalating agent that has an electrochemical
XX active site; (c) irradiating the complex so that the intercalating agent
XX forms a covalent bond to the DNA duplex; and (d) detecting the DNA duplex
XX via an electrochemical measurement (especially electrochemical light
XX emission). The method of the invention is useful for detecting a gene
XX with specific sequence and is applicable in gene diagnosis, infection or
XX disease diagnosis and genome based drug discovery. By covalently
XX attaching the intercalating agent to the DNA duplex, the background noise
XX associated with non-specific adsorption of an intercalating agent to
XX double-stranded DNA is reduced, making the method highly sensitive. The
XX present sequence represents a polyA 40-mer used as a control target
XX sequence in detection of a human cytochrome P450 gene target sequence
XX (AEF05825) in an example of the invention.
XX
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 35; DB 1; Length 40;
XX Best Local Similarity 100.0%; Pred. No. 1e+02;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 42
ADN35262/C
ID ADN35262 standard; DNA; 41 BP.
XX
XX ADN35262;
XX
XX 01-JUL-2004 (first entry)
XX

Probe sequence used for hybridization tests #4.
secondary-ion mass spectrometry; gene analysis; disease diagnosis;
species identification; ss; probe.
Synthetic.
WO2004003532-A1.
08-JAN-2004.
26-JUN-2003; 2003WO-JP008104.
28-JUN-2002; 2002JP-00190010.
28-JUN-2002; 2002JP-00191391.
28-JUN-2002; 2002JP-00191414.
(CANO ) CANON KK.
Okamoto T, Takaee H, Hashimoto H;
WPI; 2004-203385/19.
Analysis of probe supports or nucleic acids on nucleic acid chips by
halogen-based time-of-flight secondary-ion mass spectrometry, applicable
in gene analysis, disease diagnosis and species identification.
Example; SEQ ID NO 7; 68pp; Japanese.
The present invention relates to detecting a probe located and/or a
target capable of binding specifically to the probe on a substrate
comprises the preparation of a substrate with the probe and/or the target
for specific binding to the probe located on its surface, and measurement
of the substrate surface by time- of-flight secondary-ion mass
spectrometry with labeling. The method is for analyzing probe supports or
nucleic acids on nucleic acid chips with detection and quantitation of
probe conditions and hybrid of probe with target nucleic acid, which is
applicable in gene analysis, disease diagnosis and species
identification. The present sequence represents a probe sequence used for
hybridization tests.
Sequence 41 BP; 0 A; 0 C; 0 G; 38 T; 3 U; 0 Other;
Query Match 1.3%; Score 35; DB 1; Length 41;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 41 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 7

RESULT 43
AD041099
ID AD041099 standard; cDNA; 41 BP.
XX
XX AD041099;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human cDNA probe useful for disease diagnosis #250.
XX
XX ss; probe; human; bacteria; virus; prion; parasite; fungus; drug;
XX allergen; influenza; malaria; yellow fever; multiple sclerosis;
XX Alzheimer's disease; lung cancer; breast cancer; stomach cancer.
XX
XX Homo sapiens.
XX
XX WO2004046382-A2.
XX
XX 03-JUN-2004.
XX
```



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PF 21-NOV-2003; 2003WO-GB005102.
XX
PR 21-NOV-2002; 2002GB-00027238.
XX
PA (DIAG-) DIAGENIC AS.
PA (JONE/) JONES E L.
XX
XX Sharma P, Sahni NS, Loenneborg A;
PI WPI; 2004-420641/39.
XX
DR
XX
XX
PT Set of oligonucleotide probes, useful for diagnosing breast cancer or
PT Alzheimer's disease, comprising specific number of oligonucleotides.
XX
XX Disclosure; SEQ ID NO 648; 301pp; English.
XX
XX The invention relates to a set (I) of oligonucleotide probes (P1),
XX comprising at least 10 oligonucleotides chosen from oligonucleotide from
XX list of probes informative for disease diagnosis, as given in the
XX specification. (I) comprising P1 is useful for determining gene
XX expression pattern of a cell, for preparing a standard gene transcript
XX pattern characteristic of a disease or condition or its stage in an
XX organism, for preparing a test gene transcript pattern, for diagnosing or
XX identifying or monitoring a disease or condition or its stage in an
XX organism. (I) is useful in diagnosing or identifying or monitoring any
XX condition, ailment, disease or reaction that leads to the relative
XX increase or decrease in the activity of information genes of any organism
XX regardless whether the changes caused by the influence of bacteria,
XX virus, prions, parasites, fungi, drugs or allergens, where the diseases
XX influenza, malaria, yellow fever, multiple sclerosis, Alzheimer's disease
XX or cancer such as lung cancer, breast cancer and stomach cancer. (I)
XX enables analysis of gene expression within cells which provides
XX information on the state of those cells and importantly the state of the
XX individual from which the cells are derived. (I) enables early detection
XX of a disease or condition or its stage after the onset of the disease or
XX condition, even years before other subjective or objective symptoms
XX appear. (I) enables prevention of the possibility of poor analysis, e.g.,
XX misdiagnosis by comparison to other diseases. The present sequence
XX represents a human cDNA probe useful for disease diagnosis.
XX
SQ Sequence 41 BP; 41 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 41;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 44
AAD17216/c
ID AAD17216 standard; DNA; 43 BP.
AC
XX
XX AAD17216;
XX
XX
XX 29-NOV-2001 (first entry)
XX
XX Human mRNA hybridisation selection reaction biotin-dT3 oligonucleotide.
XX
XX Human; multiplex ligation-dependent amplification; amplicon;
KW single nucleotide polymorphism; hybridisation selection reaction; ss.
XX
XX Homo sapiens.
XX
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Biotin-labelled Thymidine"
XX
XX WO200161033-A2.

```

```

XX 23-AUG-2001.
XX
XX 15-FEB-2001; 2001WO-EP001739.
XX
XX 15-FEB-2000; 2000EP-00200506.
XX
XX (SCHO/) SCHOUTEN J P.
XX
XX Schouten JP;
XX
XX WPI; 2001-550053/61.
XX
XX An improved multiplex ligation-dependent amplification method for
XX detecting specific single stranded target nucleic acids in samples.
XX
XX Example 8; Page 137; 158pp; English.
XX
XX The invention relates to an improved multiplex ligation-dependent
XX amplification method for detecting specific single stranded target
XX nucleic acids in samples using a plurality of probe sets comprising at
XX least 2 probes. Each probe comprises a target specific region and a non-
XX complementary region comprising a primer binding site. The probes in each
XX set are ligated when hybridised to a target nucleic acid and amplified by
XX a primer set. The method is used for detecting a nucleotide polymorphism,
XX especially a single nucleotide polymorphism; detecting multiple single
XX stranded target nucleic acid sequences (through the detection of multiple
XX amplicons); determining the absolute or relative abundance of multiple
XX single stranded nucleic acids in a sample; and detection of a break point
XX region in rearranged nucleic acids. By using a femtomolar amount of the
XX probes, a large number of different probe sets can be used to
XX simultaneously detect and quantify a corresponding large number of target
XX sequences with high specificity. The present DNA sequence is biotin-dT3
XX labelled fluorescent oligonucleotide which is used for the hybridisation
XX selection reaction of human mRNA samples
XX
XX Sequence 43 BP; 0 A; 0 C; 0 G; 43 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 43 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 9

RESULT 45
AEA32851
ID AEA32851 standard; DNA; 34 BP.
XX
XX AEA32851;
XX
XX 28-JUL-2005 (first entry)
XX
XX NS5B genotype 2b RNA recovery primer, dA(34)..
XX
XX NS5B; replicon; hepatitis C virus infection; antiinflammatory;
KW hepatotropic; virucide; ss; PCR; primer.
XX
XX Synthetic.
XX
XX WO2005047463-A2.
XX
XX 26-MAY-2005.
XX
XX 03-NOV-2004; 2004WO-US036575.
XX
XX 05-NOV-2003; 2003US-0517605P.
XX
XX (MERI ) MERCK & CO INC.
XX
XX (RICE-) IST RICERCHE BIOL MOLECOLARE ANGELETTI.
XX

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PI Ludmerer SW, Graham DJ, Lafemina RL, Flores OA, Pizzuti M;
PI Traboni C;
XX WPI; 2005-372359/38.
XX
XX Enhancing ability of genotype 2b NS5B sequence to function in replicon
PT for producing replicons containing functional genotype 2b NS5B, and
PT measuring ability of compound to inhibit replicon activity, useful for
PT treating hepatitis C.
XX
XX Example 1; SEQ ID NO 5; 46pp; English.
PS
XX The invention relates to a novel method for enhancing the ability of a
CC genotype 2b NS5B sequence to function in a replicon. The method comprises
CC altering either or both the genotype 2b NS5B sequence to encode one or
CC more adaptive mutations, or a genotype 1b NS4B sequence to encode an
CC adaptive mutation of alanine at position 218 of a fully defined 261 amino
CC acid (AEA32874) sequence given in the specification. The invention
CC further comprises: a method for producing a chimeric replicon, comprising
CC replacing substantially all of an NS5B sequence of a hepatitis C virus
CC (HCV) replicon encoding a fully defined 1394 amino acid (AEA32849)
CC sequence, with a genotype 2b NS5B encoding nucleic acid sequence; a
CC chimeric replicon comprising an NS3-5A sequence of a genotype 1b replicon
CC or a modified 2b NS3-5A sequence of a genotype 1b replicon, where NS4B
CC contains a Val-218-Ala modification, and substantially all of a genotype
CC 2b NS5B encoding nucleic acid sequence; and a recombinant cell comprising
CC a replicon of one of the methods or chimeric replicon, where the replicon
CC is expressed in the cell. The method has virucide activity. The method is
CC useful for enhancing the ability of a genotype 2b NS5B sequence to
CC function in a replicon. The chimeric replicon and recombinant cell are
CC useful for measuring the ability of a compound to inhibit replicon
CC activity. The compounds tested can be used to treat or inhibit the onset
CC of hepatitis C virus (HCV) infection in a patient. The method is useful
CC for producing replicons containing functional genotype 2b NS5B. This
CC oligo sequence represents a primer used in the exemplification of the
CC novel method of the invention.
XX
SQ Sequence 34 BP; 34 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.2%; Score 34; DB 1; Length 34;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Dbb 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34

RESULT 46
AEB86391
ID AEB86391 standard; DNA; 34 BP.
XX
AC AEB86391;
XX
DT 06-OCT-2005 (first entry)
XX
XX Reverse primer used in PCR1 to amplify NS5B RNA from HCV genotypes.
DE
XX non-structural protein; NS5B; pharmaceutical;
KW hepatitis C virus infection; antiinflammatory; hepatotropic; virucide;
KW gastrointestinal disease; infection; PCR; primer; ss.
XX
OS Hepatitis C virus.
XX
XX WO2005070957-A1.
XX
XX 04-AUG-2005.
XX
XX 06-JAN-2005; 2005WO-US000292.
XX
XX 09-JAN-2004; 2004US-0535708P.
XX
XX (MERI) MERCK & CO INC.

XX Graham DJ, Simcoe AL, Ludmerer SW, Flores OA, Lafemina RL;
PI WPI; 2005-533995/54.
XX
XX Novel purified hepatitis C virus RNA-dependent RNA polymerase e.g. NS5B
PT polypeptide, useful for evaluating ability of its inhibitor.
XX
XX Example 1; SEQ ID NO 12; 39pp; English.
PS
XX The specification describes non-structural protein NS5B from clinically
CC important hepatitis C virus (HCV) genotypes. NS5B is a RNA-dependent RNA
CC polymerase. NS5B polypeptides and polynucleotides are useful for
CC evaluating inhibitors of NS5B. These inhibitors may be used to treat HCV
CC infection. PCR primers AEB86390 and AEB86392-AEB86393 were used in a
CC nested PCR reaction to amplify NS5B RNA, with PCR primer AEB86391 as the
CC reverse primer in PCR1. The primers were used for rescue and
CC characterization of NS5B.
XX
SQ Sequence 34 BP; 34 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.2%; Score 34; DB 1; Length 34;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Dbb 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34

RESULT 47
ABK99272
ID ABK99272 standard; RNA; 36 BP.
XX
AC ABK99272;
XX
DT 21-OCT-2002 (first entry)
XX
XX Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #2.
XX
KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
OS Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
XX (HONG/) HONG Z.
XX (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
XX
XX WPI; 2002-582330/62.
XX
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
PT of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
XX
XX The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.

CC The complex is useful for detecting HCV replicase activity and permits
 CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
 CC and evaluate antiviral inhibitors and to improve the specificity and
 CC efficacy of the inhibitors. The complex is also useful in the development
 CC of a reliable system for determining kinetic and thermodynamic constants
 CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
 CC mechanistic inhibitors for mis-incorporation or chain termination.
 CC Specifically, the short RNA template and primer pairs are useful in
 CC screening assays which are used for determining kinetic, thermodynamic
 CC and mechanistic properties of NS5B replication and ultimately in the
 CC development of inhibitors of NS5B. Newly identified inhibitors of
 CC replicase activity may be used for developing anti-HCV pharmaceuticals.
 CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
 CC templates

XX
 SQ Sequence 36 BP; 34 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 1.2%; Score 34; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 36

RESULT 48
 AAD27116
 ID AAD27116 standard; RNA; 36 BP.
 XX
 AC AAD27116;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE RNA template, AA used to direct RNA synthesis by HCV RNA polymerase.
 XX
 KW Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
 KW lead compound; RNA polymerase; ss.
 XX
 OS Unidentified.

XX US6322966-B1.
 XX
 PD 27-NOV-2001.
 XX
 PF 11-MAY-1999; 99US-00309670.
 XX
 PR 11-MAY-1999; 99US-00309670.
 XX

XX (ZHONG/) ZHONG W.
 XX (HONG/) HONG Z.
 XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;
 PI

XX WPI; 2002-096587/13.
 DR

XX Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 PT buffer.

XX Example 1; Fig 1A; 10pp; English.
 PS

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis
 CC of HCV. This activity can be used to screen for anti-HCV replicase compounds

CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.
 CC The nucleic acid synthesised by NS5B is detected by evaluating an
 CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, AA used to direct RNA synthesis by RNA
 CC polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in
 CC the exemplification of the invention

XX Sequence 36 BP; 34 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 SQ

Query Match 1.2%; Score 34; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 36

RESULT 49
 AAL07487
 ID AAL07487 standard; DNA; 38 BP.
 XX
 AC AAL07487;
 XX

DT 21-NOV-2001 (first entry)
 XX

DE Human reproductive system related antigen DNA SEQ ID NO: 10175.
 XX

KW Human; reproductive system related antigen; reproductive system disorder;
 KW cancer; gene therapy; ds.
 XX

OS Homo sapiens.
 OS

XX WO200155320-A2.
 PN

XX 02-AUG-2001.
 PD

XX 17-JAN-2001; 2001WO-US001339.
 PF

XX 31-JAN-2000; 2000US-0179065P.
 PR

PR 04-FEB-2000; 2000US-0180628P.
 PR

PR 24-FEB-2000; 2000US-0184564P.
 PR

PR 02-MAR-2000; 2000US-0186350P.
 PR

PR 16-MAR-2000; 2000US-0189874P.
 PR

PR 17-MAR-2000; 2000US-0190076P.
 PR

PR 18-APR-2000; 2000US-0198123P.
 PR

PR 19-MAY-2000; 2000US-0205515P.
 PR

PR 07-JUN-2000; 2000US-0209467P.
 PR

PR 28-JUN-2000; 2000US-0214886P.
 PR

PR 30-JUN-2000; 2000US-0215135P.
 PR

PR 07-JUL-2000; 2000US-0216647P.
 PR

PR 07-JUL-2000; 2000US-0216800P.
 PR

PR 11-JUL-2000; 2000US-0217487P.
 PR

PR 14-JUL-2000; 2000US-0218290P.
 PR

PR 26-JUL-2000; 2000US-0220963P.
 PR

PR 26-JUL-2000; 2000US-0220964P.
 PR

PR 14-AUG-2000; 2000US-0224518P.
 PR

PR 14-AUG-2000; 2000US-0224519P.
 PR

PR 14-AUG-2000; 2000US-0225213P.
 PR

PR 14-AUG-2000; 2000US-0225214P.
 PR

PR 14-AUG-2000; 2000US-0225266P.
 PR

PR 14-AUG-2000; 2000US-0225267P.
 PR

PR 14-AUG-2000; 2000US-0225268P.
 PR

PR 14-AUG-2000; 2000US-0225270P.
 PR

PR 14-AUG-2000; 2000US-0225447P.
 PR

PR 14-AUG-2000; 2000US-0225757P.
 PR

PR 14-AUG-2000; 2000US-0225758P.
 PR

PR 14-AUG-2000; 2000US-0225759P.
 PR

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PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 06-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 08-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231568P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233663P.
PR 14-SEP-2000; 2000US-0233664P.
PR 14-SEP-2000; 2000US-0233665P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.

PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 17-NOV-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
XX Rosen CA, Barash SC, Ruben SM;
PI WPI; 2001-465570/50.
XX
XX Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
XX Disclosure; SEQ ID NO 10175; 1297pp + Sequence Listing; English.
XX
XX The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
XX Sequence 38 BP; 34 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 34; DB 1; Length 38;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34

RESULT 50
ADO41321
ID ADO41321 standard; cDNA; 40 BP.
XX
XX ADO41321;
AC
XX 26-AUG-2004 (first entry)
DT
XX Human cDNA probe useful for disease diagnosis #472.
DE
XX ss; probe; human; bacteria; virus; prion; parasite; fungus; drug;
KW
```

KW allergen; influenza; malaria; yellow fever; multiple sclerosis;
 KW Alzheimer's disease; lung cancer; breast cancer; stomach cancer.
 OS Homo sapiens.
 XX WO2004046382-A2.
 XX 03-JUN-2004.
 XX 21-NOV-2003; 2003WO-GB005102.
 XX 21-NOV-2002; 2002GB-00027238.
 XX (DIAG-) DIAGENIC AS.
 XX (JONE/) JONES E L.
 XX Sharma P, Sahni NS, Loenneborg A;
 XX WPI; 2004-420641/39.
 XX Set of oligonucleotide probes, useful for diagnosing breast cancer or
 XX Alzheimer's disease, comprising specific number of oligonucleotides.
 XX Disclosure; SEQ ID NO 1378; 301pp; English.
 XX The invention relates to a set (I) of oligonucleotide probes (p1),
 XX comprising at least 10 oligonucleotides chosen from oligonucleotide from
 XX list of probes informative for disease diagnosis, as given in the
 XX specification. (I) comprising p1 is useful for determining gene
 XX expression pattern of a cell, for preparing a standard gene transcript
 XX pattern characteristic of a disease or condition or its stage in an
 XX organism, for preparing a test gene transcript pattern, for diagnosing or
 XX identifying or monitoring a disease or condition or its stage in an
 XX organism. (I) is useful in diagnosing or identifying or monitoring any
 XX condition, ailment, disease or reaction that leads to the relative
 XX increase or decrease in the activity of information genes of any organism
 XX regardless whether the changes caused by the influence of bacteria,
 XX virus, prions, parasites, fungi, drugs or allergens, where the diseases
 XX influenza, malaria, yellow fever, multiple sclerosis, Alzheimer's disease
 XX or cancer such as lung cancer, breast cancer and stomach cancer. (I)
 XX enables analysis of gene expression within cells which provides
 XX information on the state of those cells and importantly the state of the
 XX individual from which the cells are derived. (I) enables early detection
 XX of a disease or condition or its stage after the onset of the disease or
 XX condition, even years before other subjective or objective symptoms
 XX appear. (I) enables prevention of the possibility of poor analysis, e.g.,
 XX misdiagnosis by comparison to other diseases. The present sequence
 XX represents a human cDNA probe useful for disease diagnosis.
 XX
 SQ Sequence 40 BP; 31 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 1.2%; Score 33.6; DB 1; Length 40;
 Best Local Similarity 90.0%; Pred. No. 1.3e+02;
 Matches 36; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 2696 CTAAGTTGTACTAAAAA AAAAAAAAAAAAAAAAAAAAAA 2735
 |||||
 Db 1 CTGAGTATTAACTAAAAA AAAAAAAAAAAAAAAAAAAAAA 40
 RESULT 51
 ABN89412
 ID ABN89412 standard; DNA; 40 BP.
 XX
 AC ABN89412;
 XX
 XX 30-AUG-2002 (first entry)
 XX Polymorphism detection related oligonucleotide SEQ ID NO:4.
 DE Polymorphism; detection; mass spectroscopy; ss.
 KW Synthetic.
 XX

XX WO200250307-A1.
 XX 27-JUN-2002.
 XX 12-DEC-2001; 2001WO-JP010892.
 XX 12-DEC-2000; 2000JP-00378091.
 XX (CHUS) CHUGAI SEIYAKU KK.
 XX Inoko H, Tamiya G, Nakajima K, Kimura N, Nagashima R, Morikawa M;
 XX Okamoto K;
 XX WPI; 2002-508814/54.
 XX Detection of DNA polymorphism by mass spectroscopy for investigation and
 XX diagnosis of gene-related diseases.
 XX Example 3; Page 28; 34pp; Japanese.
 XX The present invention describes a method for detecting polymorphisms in
 XX DNA by: (a) preparing a DNA sample from patients containing the DNA
 XX region in which the target polymorphism is located; (b) hybridising to an
 XX appropriate oligonucleotide fragment, immobilised on a support; and (c)
 XX detecting the hybridised target DNA by mass spectroscopy. The method can
 XX be used for the investigation and diagnosis of gene-related diseases. The
 XX method allows polymorphisms to be detected rapidly and effectively in a
 XX large number of specimens. The present sequence represents an
 XX oligonucleotide which is used in an example from the present invention
 XX
 SQ Sequence 40 BP; 30 A; 0 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 1.2%; Score 33.2; DB 1; Length 40;
 Best Local Similarity 92.1%; Pred. No. 1.4e+02;
 Matches 35; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2701 TTGTACTAAAAA AAAAAAAAAAAAAAAAAAAAAA 2738
 |||||
 Db 3 TTTTITTA AAAAAAAAAAAAAAAAAAAAAA 40
 RESULT 52
 AAF29153/C
 ID AAF29153 standard; DNA; 33 BP.
 XX
 AC AAF29153;
 XX
 XX 04-APR-2001 (first entry)
 XX PCR primer SEQ ID 24 used to amplify SRSV specific cDNA.
 DE PCR primer
 XX Small round structured virus; SRSV; food poisoning; PCR primer; ss.
 XX Small round structured virus.
 OS WO200079280-A1.
 XX
 XX 28-DEC-2000.
 XX 22-JUN-2000; 2000WO-JP004095.
 XX 22-JUN-1999; 99JP-00175928.
 XX (NINA-) JAPAN NAT INST INFECTIOUS DISEASES.
 XX (DENK-) DENKA SEIKEN KK.
 XX Takeda N, Natori K, Miyamura T, Kamata K, Sato T, Sato S;
 XX WPI; 2001-080848/09.
 XX Kit for the detection and typing of small round-structured virus (SRSV)
 XX strains for investigation of food poisoning outbreaks, contains
 PT

PT antibodies.
XX
XX Example 1; Page 75; 84pp; Japanese.
XX
XX This invention relates to a kit for the detection and typing of small
CC round structured virus (SRSV) strains. The kit contains antibodies
CC directed against peptides represented in sequences AAB49700 - AAB49710,
CC which are each SRSV strain specific. Polynucleotide sequences AAF20141 -
CC AAF20151 represent cDNA encoding the strain specific proteins. The kit is
CC used for detecting and typing strains of SRSV in order to prevent the
CC spread of infection and to examine the epidemiology of outbreaks. PCR
CC primers AAF29152 - AAF29163 are used to amplify SRSV strain specific cDNA
CC sequences
XX
SQ Sequence 33 BP; 0 A; 0 C; 0 G; 33 T; 0 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
Db 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 53
ADS19106/c
ID ADS19106 standard; DNA; 33 BP.
XX
AC ADS19106;
XX
XX 30-DEC-2004 (first entry)
XX
DE Multisignal labeling reagent associated oligonucleotide seqid 1.
XX
XX Labeling molecule; solubility; multisignal labeling reagent; ss;
KW DNA-RNA hybrid.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_RNA 3
FT /*tag= a
FT /note= "Allylamine modified uridine"
FT misc_RNA 9
FT /*tag= b
FT /note= "Allylamine modified uridine"
FT misc_RNA 15
FT /*tag= c
FT /note= "Allylamine modified uridine"
FT misc_RNA 21
FT /*tag= d
FT /note= "Allylamine modified uridine"
FT misc_RNA 27
FT /*tag= e
FT /note= "Allylamine modified uridine"
FT misc_RNA 33
FT /*tag= f
FT /note= "Allylamine modified uridine"
XX
XX US2004198971-A1.
XX
XX 07-OCT-2004.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX (RABB/) RABBANI E.
PA (STAV/) STAVRIANOPOULOS J G.
PA (DONE/) DONEGAN J J.
XX
XX Rabbani E, Stavrianopoulos JG, Donegan JJ;
PI

XX
DR WPI; 2004-727850/71.
XX
XX Composition of multi signal labeling reagents, useful for detecting or
PT quantifying analyte in specimen, has oligomer/polymer having labeled
PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX
XX Example 1; SEQ ID NO 1; 20pp; English.
XX
XX The invention describes a composition (I) of matter comprising an
CC oligomer or polymer having two or more labeled groups, where the label or
CC labels are chemically linked to the oligomer or polymer, one or more
CC reactive groups, and one or more charged groups where the charged groups
CC are covalently linked to the oligomer or polymer or comprise part of the
CC backbone of the oligomer or polymer, or any of their combination. Also
CC described are: a composition (II) comprising a target molecule that has
CC been labeled using (I); and a composition (III) prepared by a target
CC labeling process comprising (i) providing a target for labeling, and a
CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
CC target and the labeling reagent to form the composition having the
CC formula (F3) or (F4). (i) is useful for labeling a target molecule;
CC detecting or quantifying an analyte in a specimen; and detecting or
CC quantifying an analyte in a specimen. (ii) or (iii) is useful for
CC detecting or quantifying an analyte, which involves providing (ii) or
CC (iii), where the target is an analyte specific moiety, contacting the
CC (ii) or (iii) with a specimen suspected of containing the analyte, and
CC measuring the amount of (ii) or (iii) bound to analytes in the specimen
CC to detect or quantify the analyte. (i) detects or quantifies analyte with
CC high sensitivity. In (i), the multiple labeled groups increases the
CC amount of signal that is added to the analyte specific moiety, the
CC presence of reactive groups enables attachment of the multiple labeled
CC groups to a desirable target and the presence of charged group increases
CC solubility. This sequence represents a multisignal labeling reagent
CC associate oligonucleotide.
XX
SQ Sequence 33 BP; 0 A; 0 C; 0 G; 27 T; 6 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
Db 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 54
ABK99273
ID ABK99273 standard; RNA; 36 BP.
XX
AC ABK99273;
XX
XX 21-OCT-2002 (first entry)
XX
XX Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #3.
DE Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
XX Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
PI

XX WPI; 2002-582330/62.
 XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
 PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
 PT and template and primer which do not form a stable duplex in the absence
 PT of HCV NS5B.

XX Example; Page 6; 17pp; English.

XX The invention relates to a replicase complex comprising a hepatitis C
 CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
 CC complementary nucleic acid primer which is annealed to the 3' terminus of
 CC the template, where the template is at least three nucleotides and the
 CC primer is two or three nucleotides, and the template and primer do not
 CC form a stable duplex in solution in the absence of the HCV NS5B protein.
 CC The complex is useful for detecting HCV replicase activity and permits
 CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
 CC and evaluate antiviral inhibitors and to improve the specificity and
 CC efficacy of the inhibitors. The complex is also useful in the development
 CC of a reliable system for determining kinetic and thermodynamic constants
 CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
 CC mechanistic inhibitors for mis-incorporation or chain termination.
 CC Specifically, the short RNA template and primer pairs are useful in
 CC screening assays which are used for determining kinetic, thermodynamic
 CC and mechanistic properties of NS5B replication and ultimately in the
 CC development of inhibitors of NS5B. Newly identified inhibitors of
 CC replicase activity may be used for developing anti-HCV pharmaceuticals.
 CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
 CC templates

XX Sequence 36 BP; 33 A; 0 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
 Db |||||
 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 55

AAD27117
 ID AAD27117 standard; RNA; 36 BP.

XX AAD27117;

XX 09-APR-2002 (first entry)

XX RNA template, AU used to direct RNA synthesis by HCV RNA polymerase.

XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
 KW lead compound; RNA polymerase; ss.

XX Unidentified.

XX US6322966-B1.

XX 27-NOV-2001.

XX 11-MAY-1999; 99US-00309670.

XX 11-MAY-1999; 99US-00309670.

XX (ZHON/) ZHONG W.

XX (HONG/) HONG Z.

XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;

XX WPI; 2002-096587/13.

XX

PT Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 PT buffer.

XX Example 1; Fig 1A; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis of
 CC HCV. This activity can be used to screen for anti-HCV replicase compounds
 CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.
 CC The nucleic acid synthesized by NS5B is detected by evaluating an
 CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, AU used to direct RNA synthesis by RNA
 CC polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in
 CC the exemplification of the invention

XX Sequence 36 BP; 33 A; 0 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
 Db |||||
 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 56

AAD27125

ID AAD27125 standard; RNA; 37 BP.

XX AAD27125;

XX 09-APR-2002 (first entry)

XX RNA template, (AU)2 used to direct RNA synthesis by HCV RNA polymerase.

XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
 KW lead compound; RNA polymerase; ss.

XX Unidentified.

XX US6322966-B1.

XX 27-NOV-2001.

XX 11-MAY-1999; 99US-00309670.

XX 11-MAY-1999; 99US-00309670.

XX (ZHON/) ZHONG W.

XX (HONG/) HONG Z.

XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;

XX WPI; 2002-096587/13.

XX

PT Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 PT buffer.

XX PS Example 1; Fig 2A; 10pp; English.

XX CC The present invention relates to an assay system for hepatitis C virus (HCV) replicase activity. The assay system comprises an RNA template that has an unstable, small stemloop at the 3' end capable of forming a copy-back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP, and UTP nucleoside triphosphates (NTPs), where one of the NTP is radiolabelled and an assay buffer that supports replication activity of NS5B. The invention also relates to the identification of optimal properties of an RNA template for copy-back self-priming RNA synthesis of HCV. This activity can be used to screen for anti-HCV replicase compounds or to characterise the biological relevance of lead compounds. The optimal RNA templates can be used for developing a system to characterise HCV NS5B polymerase mechanistically and kinetically and for designing small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay system of the invention is useful for detecting HCV replicase activity. The nucleic acid synthesised by NS5B is detected by evaluating an autoradiograph of reaction products separated by gel electrophoresis. The present sequence is RNA template, (AU)2 used to direct RNA synthesis by RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in the exemplification of the invention

XX CC Sequence 37 BP; 33 A; 0 C; 2 G; 0 T; 2 U; 0 Other;

XX SQ Query Match 1.2%; Score 32.4; DB 1; Length 37;
Best Local Similarity 97.1%; Pred. No. 1.5e+02;
Matches 33; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
|||||

DB 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUA 36

RESULT 57

AA070278/c

ID AA070278 standard; DNA; 32 BP.

XX AC AA070278;

XX DT 03-OCT-2002 (revised)

XX DT 26-MAY-1991 (first entry)

XX CC Sequence of scissile link probe MRC068 (HL).

XX KW Hybridisation; probe; ss.

XX OS Synthetic.

XX PN EP227976-A.

XX PD 08-JUL-1987.

XX PF 04-DEC-1986; 86EP-00116906.

XX PR 05-DEC-1985; 85US-00805279.

XX PA (MEIO-) MEIOGENICS INC.

XX PI Duck P, Bender R, Crosby W, Robertson JG;

XX DR WPI; 1987-186567/27.

XX CC Synthetic nucleic acid probes - comprising two nucleic acid sequences linked by a scissile linkage.

XX PS Example; p29; 46pp; English.

XX CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile linkage; n = 1 or 1,000, which is used for the detection of specific DNA or RNA sequences in a test soln. The scissile link probes may be PL (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid

CC Support). The differential liability of DNA and RNA may be exploited in a heterogeneous system when the scissile linkage is an RNA molecule. In the examples, counter probe molecules 9 through 16 were used to determine suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing OS field.)

XX CC Sequence 32 BP; 0 A; 0 C; 0 G; 24 T; 8 U; 0 Other;

XX SQ Query Match 1.2%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
|||||

DB 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 58

AA092244/c

ID AA092244 standard; DNA; 32 BP.

XX AC AA092244;

XX DT 25-MAR-2003 (revised)

XX DT 31-OCT-2002 (revised)

XX DT 25-APR-1990 (first entry)

XX DE SS probe MRC068.

XX KW Probe MRC068; solid support; ribonuclease.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT misc_feature 1..14
/tag= a
/note= "deoxyribonucleotides."

FT misc_feature 15..22
/tag= b
/note= "ribonucleotides."

FT misc_feature 23..32
/tag= c
/note= "deoxyribonucleotides."

XX PN W08910415-A.

XX PD 02-NOV-1989.

XX PF 29-APR-1988; 88US-00187814.

XX PR 29-APR-1988; 88US-00187814.

XX PA (MEIO-) MEIOGENICS INC.

XX PI Duck P, Bender R;

XX DR WPI; 1989-339977/46.

XX CC Detecting target nucleic acid molecules - using excess complementary nucleic acid probes and nicking to complete a cycling sequence.

XX PS Disclosure; Page 24; 34pp; English.

XX CC Probe MRC068 is bound by a hydrolysable linkage to a solid support at its 3' end. It is used by reacting excess probe with a target nucleic acid; nicking hybridised probe at least once within a predetermined sequence to form 2 or more probe fragments hybridised to the target sequence, which results in the probe fragments becoming hybridised to another probe; and identifying probe fragments, so detecting the target sequence. The probe can react with target sequence to complete a cycling sequence. Using this system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)

```

CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 24 T; 8 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 59
ADC33445/c
ID ADC33445 standard; DNA; 32 BP.
XX
AC ADC33445;
XX
DT 18-DEC-2003 (first entry)
XX
DE Template oligonucleotide #SEQ ID 2.
XX
KW Binding; tandem repeat; label; analyte detection; ss.
XX
OS Synthetic.
XX
PN WO2003072721-A2.
XX
PD 04-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005301.
XX
PR 21-FEB-2002; 2002US-0359223P.
XX
PR 08-MAY-2002; 2002US-0379360P.
XX
PA (DISC-) DISCOVERX INC.
XX
PI Wu M, Ullman E;
XX
DR WPI; 2003-712717/67.
XX
PT Detecting a label comprising employing (as the label) a reagent having a
PT 3' extendable terminus hybridized to a tandem repeat template in
PT combination with a DNA polymerase and dNTPs necessary for repetitively
PT replicating the tandem repeat.
XX
PS Example; SEQ ID NO 2; 38pp; English.
XX
CC The invention relates to a method for detecting a label, comprising
CC employing (as the label) a reagent having a 3' extendable terminus
CC hybridised to a tandem repeat template in combination with a DNA
CC polymerase and dNTPs necessary for repetitively replicating the tandem
CC repeat. The method involves detecting a binding event between first and
CC second binding members, employing a label to determine the occurrence of
CC the binding event. The tandem repeating units are polyT. The method of
CC the invention is useful in detecting an analyte using repetitive
CC extension along a tandem repeat. The extended nucleic acid may be used
CC for detecting a moiety, particularly involved in a binding event
CC employing a reagent. The current sequence represents a template member
CC oligonucleotide containing a polyT tandem repeat that binds to the
CC extendable oligonucleotide given in ADC33444.
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 32 T; 0 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 60
AAZ98722/c
ID AAZ98722 standard; cDNA; 40 BP.
XX
AC AAZ98722;
XX
DT 20-JUN-2000 (first entry)
XX
DE PCR primer used for swine vesicular disease virus gene synthesis.
XX
KW Swine vesicular disease virus; SVDV; swine vesicular disease;
KW Taiwan Yu-Li strain; foot and mouth disease; coxsackie virus;
KW differentiation; vaccine; prevent; PCR primer; ss.
XX
OS Swine vesicular disease virus.
XX
PN EP982403-A1.
XX
PD 01-MAR-2000.
XX
PF 14-AUG-1998; 98EP-00306486.
XX
PR 14-AUG-1998; 98EP-00306486.
XX
PA (BIOT-) DEV CENT BIOTECHNOLOGY.
XX
PI Hwang CL, Lo C, Yang Y, Jeng K, Chang EL;
XX
DR WPI; 2000-258616/23.
XX
PT Mutant strains of swine vesicular disease virus (SVDV) used in vaccines
PT to prevent swine vesicular disease.
XX
PS Example 2; Page 6; 66pp; English.
XX
CC This sequence represents a PCR primer used to determine the full length
CC cDNA sequence of the swine vesicular disease virus (SVDV) gene sequence
CC of Taiwan Yu-Li strain (see AAZ98717). SVDV is the causative agent of
CC swine vesicular disease, which is very similar to foot and mouth disease.
CC The invention relates to the wild-type Taiwan Yu-Li strain cDNA sequence,
CC and the gene sequences of the mutant SVDV strains N3, H21 and SP7. The
CC mutant SVDV nucleotide sequence can be used in a vaccine for the
CC prophylaxis of swine vesicular disease. The invention also includes a
CC method for differentiating the mutant SVDV nucleotide sequences from the
CC wild type strain of SVDV, coxsackievirus and foot-and-mouth disease virus
CC through the use of polymerase chain reaction
XX
SQ Sequence 40 BP; 1 A; 3 C; 3 G; 33 T; 0 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 9

RESULT 61
AAV12483/c
ID AAV12483 standard; DNA; 39 BP.
XX
AC AAV12483;
XX
DT 15-MAY-1998 (first entry)
XX
DE Oligonucleotide SEQ ID NO:6 from US5174320 Example 2.
XX
KW Synthesis; selection; amplification; circular oligonucleotide;
KW rolling circle synthesis; diagnosis; therapeutic agent; ss.
XX
OS Synthetic.

```

```

XX US5714320-A.
PN
XX
XX
PD 03-FEB-1998.
XX
XX 23-FEB-1995; 95US-00393439.
XX
XX 15-APR-1993; 93US-00047860.
XX
XX (UYRP ) UNIV ROCHESTER.
XX
XX Kool ET;
XX
XX WPI; 1998-144278/13.
XX
XX Rolling circle synthesis of oligo:nucleotide(s) - using primed circular
XX template to produce oligonucleotide multimer for cleavage.
XX
XX Example 2; Col 45; 38pp; English.
XX
XX The present sequence represents an oligonucleotide used in an example of
XX the present invention. The present invention describes a method for
XX synthesizing a selected oligonucleotide (I) having well defined ends. The
XX method comprises: (a) annealing a primer to a single-stranded (ss)
XX circular template to yield a primed circular template, where the template
XX comprises: (i) at least one nucleotide sequence complementary to (I); and
XX (ii) at least one nucleotide effective to produce a cleavage site in the
XX oligonucleotide multimer; (b) combining the primed circular template with
XX at least two types of nucleotide triphosphates and a polymerase enzyme
XX without the addition of auxiliary proteins to yield a ss oligonucleotide
XX multimer complementary to the circular oligonucleotide template.
XX comprising multiple copies of (I); and (c) cleaving the oligonucleotide
XX multimer at the cleavage site to produce (I) having well defined ends.
XX The method is used for the large-scale synthesis of DNA and RNA oligomers
XX for use, e.g. as probes and diagnostic agents and/or therapeutic agents
XX
XX Sequence 39 BP; 0 A; 0 C; 3 G; 36 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 31.8; DB 1; Length 39;
Best Local Similarity 94.3%; Pred. No. 1.7e+02;
Matches 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 39 AAAAAAAAAACACAAAAAAAAAAAAAAAAACAAAAAAAAA 5
RESULT 62
AA330019/C
ID AAX30019 standard; DNA; 39 BP.
XX
XX AAX30019;
XX
XX 16-JUN-1999 (first entry)
DT
XX
XX Multimer SEQ ID NO:6.
DE
XX
XX Multimer; probe; diagnosis; synthesis; detection; polymerase; ss.
KW
XX
XX Synthetic.
OS
XX
XX WO9909216-A2.
PN
XX
XX 25-FEB-1999.
PD
XX
XX 13-AUG-1998; 98WO-US016776.
XX
XX 13-AUG-1997; 97US-00910632.
XX
XX (UYRP ) UNIV ROCHESTER.
XX
XX Kool ET;
XX
XX

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DR WPI; 1999-181062/15.
XX
XX New detectably labelled oligonucleotide multimer, comprising multiple
XX contiguous copies of a repeated oligonucleotide - useful for detecting
XX target molecules in diagnosis and medicinal applications.
XX
XX Example 2; Page 41; 103pp; English.
XX
XX The present invention describes a detectably labelled oligonucleotide
XX multimer, comprising multiple contiguous copies of a repeated
XX oligonucleotide. The detectably labelled oligonucleotide multimer is
XX useful for detecting a target molecule. Oligonucleotide multimers may be
XX produced in sufficient quantity to be useful for diagnostic and medical
XX applications. The multimers are useful for affinity labelling of
XX proteins, and for signal amplification in highly sensitive affinity
XX capture and sequence identification applications. The method provides a
XX faster, cheaper and simpler way for large-scale production of DNA and RNA
XX oligomers and multimers. The incorporation of labels enables the
XX oligonucleotide multimers to be useful in diagnostics and medicine. The
XX present sequence represents an oligonucleotide used in an example from
XX the present invention
XX
XX Sequence 39 BP; 0 A; 0 C; 3 G; 36 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 31.8; DB 1; Length 39;
Best Local Similarity 94.3%; Pred. No. 1.7e+02;
Matches 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 39 AAAAAAAAAACACAAAAAAAAAAAAAAAAACAAAAAAAAA 5
RESULT 63
ADI32816
ID ADI32816 standard; RNA; 39 BP.
XX
XX ADI32816;
XX
XX 22-APR-2004 (first entry)
DT
XX
XX 3' flanking RNA of IT ribozyme (Rz) from CHOP portion of SNIPAA cassette.
DE
XX
XX HPV infection; replication; cytostatic; virucide; cervical dysplasia;
KW carcinoma; oral mucosal cancer; laryngeal; vaccine; gene therapy;
KW double internal trans-acting ribozyme; single; dITRz; ITRz; CHOP portion;
KW SNIPAA cassette; ss.
XX
XX Unidentified.
OS
XX
XX WO2004002416-A2.
XX
XX 08-JAN-2004.
XX
XX 26-JUN-2003; 2003WO-US020340.
XX
XX 26-JUN-2002; 2002US-0391795P.
PR
XX 14-OCT-2002; 2002US-0417997P.
PR
XX 21-FEB-2003; 2003US-0449066P.
PR
XX (PENN-) PENN STATE RES FOUND.
XX
XX Clawson GA, Pan W, Christensen N, Thiboutot D;
XX
XX WPI; 2004-082869/08.
XX
XX Treating human papilloma virus (HPV) infection, e.g. cervical dysplasias
XX or HPV-associated cervical carcinoma, comprises administering to a
XX patient a nucleic acid molecule that inhibits expression associated with
XX HPV replication.
XX
XX Example 2; SEQ ID NO 56; 65pp; English.
XX
XX

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Db      31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 66
AEE86830/c
ID AEE86830 standard; DNA; 31 BP.
XX
XX AC AEE86830;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo-dt31-NH2 #5.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 31
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 3'-terminal amide"
XX
XX PN DE102004025746-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025746.
XX
XX PR 26-MAY-2004; 2004DE-10025746.
XX
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX
XX PI Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-040183/05.
XX
XX DR Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX PT -matrix extension, using a solid phase with reduced non-specific binding
XX PT of labeled components.
XX
XX PS Disclosure; Page 97; 144pp; German.
XX
XX CC This invention relates to a novel method for parallel sequence analysis
XX CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX CC The SP is useful for multiple parallel sequencing of nucleic acids and
XX CC shows reduced non-specific binding of labeled or unlabeled nucleotides
XX CC and nucleic acids, so the background remains low even after prolonged and
XX CC repeated contact of the solid phase with high concentrations of labeled
XX CC reagents. The present sequence is that of an oligonucleotide which was
XX CC used in the development of the novel method of the invention.
XX
XX SQ Sequence 31 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 67
AEE86829/c
ID AEE86829 standard; DNA; 31 BP.
XX
XX AC AEE86829;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo-dt31-NH2 #4.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers

```

```

DE Novel solid phase-related oligonucleotide Cy3-Oligo-dt31-NH2 #4.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX
XX modified_base 31
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 3'-terminal amide"
XX
XX PN DE102004025746-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025746.
XX
XX PR 26-MAY-2004; 2004DE-10025746.
XX
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX
XX PI Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-040183/05.
XX
XX DR Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX PT -matrix extension, using a solid phase with reduced non-specific binding
XX PT of labeled components.
XX
XX PS Disclosure; Page 97; 144pp; German.
XX
XX CC This invention relates to a novel method for parallel sequence analysis
XX CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX CC The SP is useful for multiple parallel sequencing of nucleic acids and
XX CC shows reduced non-specific binding of labeled or unlabeled nucleotides
XX CC and nucleic acids, so the background remains low even after prolonged and
XX CC repeated contact of the solid phase with high concentrations of labeled
XX CC reagents. The present sequence is that of an oligonucleotide which was
XX CC used in the development of the novel method of the invention.
XX
XX SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 68
AEE86846/c
ID AEE86846 standard; DNA; 31 BP.
XX
XX AC AEE86846;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo-dt31-NH2 #4.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers

```


PT nucleic acids, has reduced non-specific binding of labeled components.
 XX
 PS Disclosure; Page 62; 88pp; German.
 XX
 CC This invention relates to a novel surface of a solid phase (SP), useful
 CC in methods for parallel analysis of many individual nucleic acids (NA) by
 CC optical methods. The novel SP is useful for multiple parallel sequencing
 CC of nucleic acids and shows reduced non-specific binding of labeled or
 CC unlabeled nucleotides and nucleic acids. The present sequence is that of
 CC an oligonucleotide which was used in the development of the novel solid
 CC phase of the invention.
 XX
 SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 DB 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 71
 AEF12155/c
 ID AEF12155 standard; DNA; 31 BP.
 XX AC AEF12155;
 XX 09-MAR-2006 (first entry)
 DT
 DE Oligonucleotide Cy3-Oligo-dT31-NH2.
 KW DNA detection; DNA sequencing; primer; ss.
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "optionally labeled with Cy3"
 FT modified_base 31 /*tag= b
 FT /mod_base= OTHER
 FT /note= "optionally labeled with an amide group or Si(O-
 FT Me)3"
 XX
 PN DE102004025744-A1.
 XX
 XX 29-DEC-2005.
 XX
 XX 26-MAY-2004; 2004DE-10025744.
 XX
 XX 26-MAY-2004; 2004DE-10025744.
 XX
 XX (CHER/) CHERKASOV D.
 PA (HENN/) HENNIG C.
 PA (GENO-) GENOVXX GMBH.
 XX
 XX Cherkasov D, Hennig C;
 PI WPI; 2006-081126/09.
 XX
 XX Surface of a solid support, useful for multiple parallel analysis of
 XX nucleic acids by optical methods, having low non-specific binding of
 PT labeled components.
 PT
 XX Disclosure; Page 62; 88pp; German.
 XX
 CC This invention describes a novel solid support surface for parallel
 CC analysis of many individual nucleic acids by optical methods. The
 CC invention also describes; a) a solid phase in which the surface shows

CC reduced non-specific binding of labeled components; b) methods for
 CC preparing the novel solid support and c) methods of parallel analysis of
 CC many nucleic acid by optical methods, using the solid support. The
 CC surface of the solid support is made of silica, glass, silicon dioxide or
 CC Si-OH; is flat and has nucleic acid chains fixed to it, optionally
 CC through a linker. The solid phase is preferably part of a device that
 CC allows fluid exchange and it is permeable to light in the wavelength
 CC regions 200-400; 200-2000 or 400-800 nm. An external layer of solid
 CC support is removed, then the nucleic acid is coupled to it, optionally
 CC after attachment of a linker layer. Alternatively, after removing the
 CC external layer, nucleic acids are synthesized on the surface by cyclic
 CC coupling, optionally after attachment of a linker, and in either case,
 CC additional substances (specifically phosphate, sulfate or carboxy-
 CC containing monomers or polymers) can be coupled to the surface, after
 CC attachment or synthesis of nucleic acids. Only part of the surface is
 CC removed, particularly by a chemical reaction with hydrofluoric acid or
 CC sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick.
 CC Particularly after removal of the surface layer, the surface is not dried
 CC and all subsequent steps are done in a liquid phase. The nucleic acids
 CC analyzed represent a single population or many different populations and
 CC contains 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long
 CC and is e.g. a branched or linear polymer; (strept)avidin or a nucleic
 CC acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or
 CC dideoxyribo-nucleoside triphosphates, in which the label is cleavable.
 CC Particularly analysis involves cyclic sequencing and a preferred method
 CC comprises: binding nucleic acid to the solid support, with formation of a
 CC extensible primer-matrix complex; performing cyclic reactions and
 CC reconstructing the nucleic acid sequence. The sequences being analyzed
 CC contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic
 CC acid sequences that function as primers for the sequencing reaction;
 CC alternatively the nucleic acid is fixed to the support and then
 CC hybridized with a primer. The incorporated nucleotide includes a
 CC reversible terminating group so that only one nucleotide can be
 CC incorporated in each step. The surface is specifically used for multiple
 CC parallel sequencing of nucleic acids. The surface shows reduced non-
 CC specific binding of labeled and unlabeled nucleotides or nucleic acids,
 CC so assay sensitivity is improved. This sequence represents an
 CC oligonucleotide used to illustrate the method of the invention.
 XX
 SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 DB 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 72
 AEF94772/c
 ID AEF94772 standard; DNA; 31 BP.
 XX AC AEF94772;
 XX 20-APR-2006 (first entry)
 DT
 DE Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
 XX ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-
 XX Unidentified.
 OS Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= b
 FT /mod_base= 5'-Cy3
 FT modified_base 31 /*tag= b
 FT /mod_base= 3'-NH2
 FT
 XX


```

PN DE102004025695-A1.
XX
PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025695.
XX
PR 26-MAY-2004; 2004DE-10025695.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185819/20.
XX
PT Optical fluorescent parallel process to analyse nucleic acid chains in
PT which a sample solid is bound with a primer-matrix complex.
XX
PS Example 5; Page 66; 94pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. Further claimed is
CC that the process is able to determine many sequences in parallel. The
CC present sequence is that of oligonucleotide Cy3-dt31- which was used in
CC the development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 73
ID AEF94773/c
AC AEF94773 standard; DNA; 31 BP.
XX
AC AEF94773;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dt31-NH2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-NH2.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 31 /*tag= b
FT /mod_base= 3'-NH2
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX

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XX (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185819/20.
XX
PT Optical fluorescent parallel process to analyse nucleic acid chains in
PT which a sample solid is bound with a primer-matrix complex.
XX
PS Example 5; Page 66; 94pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The Nucleic
CC is faster, more efficient and cheaper than prior art. Further claimed is
CC that the process is able to determine many sequences in parallel. The
CC present sequence is that of oligonucleotide dt31-NH2 which was used in
CC the development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 74
ID AEF94778/c
AC AEF94778 standard; DNA; 31 BP.
XX
AC AEF94778;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dt31-Si(O-Me)3.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-Si(O.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 31 /*tag= b
FT /mod_base= 3'-Si(O-Me)3
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX

```

```

DR WPI; 2006-185819/20.
XX
PT Optical fluorescent parallel process to analyse nucleic acid chains in
PT which a sample solid is bound with a primer-matrix complex.
PS
XX Example 5; Page 66; 94pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. Further claimed is
CC that the process is able to determine many sequences in parallel. The
CC present sequence is that of oligonucleotide dt31-Si(O which was used in
CC the development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
      Query Match      1.1%; Score 31; DB 1; Length 31;
      Best Local Similarity 100.0%; Pred. No. 1.6e+02;
      Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 75
AEF94756/c
ID AEF94756 standard; DNA; 31 BP.
XX
AC AEF94756;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
FT modified_base 31 /*tag= b
FT /*mod_base= 3'-NH2
XX
PN DE102004025694-A1.
XX
PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025694.
XX
PR 26-MAY-2004; 2004DE-10025694.
XX
PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185818/20.
XX
CC Optical fluorescent ultra-high parallel process to analyse nucleic acid
CC chains in which a sample solid is bound with a primer-matrix complex.
PT

```

```

XX Example 5; Page 67; 95pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. The present
CC sequence is that of oligonucleotide Cy3-dt31- which was used in the
CC development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
      Query Match      1.1%; Score 31; DB 1; Length 31;
      Best Local Similarity 100.0%; Pred. No. 1.6e+02;
      Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 76
AEF94757/c
ID AEF94757 standard; DNA; 31 BP.
XX
AC AEF94757;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dt31-NH2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-NH2.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 31 /*tag= b
FT /*mod_base= 3'-NH2
XX
PN DE102004025694-A1.
XX
PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025694.
XX
PR 26-MAY-2004; 2004DE-10025694.
XX
PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185818/20.
XX
CC Optical fluorescent ultra-high parallel process to analyse nucleic acid
CC chains in which a sample solid is bound with a primer-matrix complex.
XX
XX Example 5; Page 67; 95pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their

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CC co-ordinates logged and the signals removed. The marked nucleotides are
 CC detected and their co-ordinates logged and the signals removed. The solid
 CC phase is then washed and the sequence repeated as necessary. The Nucleic
 CC acid chain sequence is then reconstructed using the signals. The process
 CC is faster, more efficient and cheaper than prior art. The present
 CC sequence is that of oligonucleotide dt31-NH2 which was used in the
 CC development of the novel process of the invention.

SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;
 Matches 31; Conservative 0; Mismatches 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 77
 AEF94762/c
 ID AEF94762 standard; DNA; 31 BP.
 XX
 AC AEF94762;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Optical DNA analysis process-related oligonucleotide dt31-Si(O-Me)3.
 XX
 KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-Si(O.
 XX
 OS Unidentified.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 31 /*tag= b
 FT /mod_base= 3'-Si(O-Me) 3
 XX
 XX DE102004025694-A1.
 XX
 XX 23-FEB-2006.
 XX
 XX 26-MAY-2004; 2004DE-10025694.
 XX
 XX 26-MAY-2004; 2004DE-10025694.

XX (CHER/) CHERKASOV D.
 XX (HENN/) HENNIG C.
 XX (GENO-) GENOVORX GMBH.
 XX Cherkasov D, Hennig C;
 XX WPI; 2006-185818/20.
 XX
 XX Optical fluorescent ultra-high parallel process to analyse nucleic acid
 XX chains in which a sample solid is bound with a primer-matrix complex.

XX Example 5; Page 67; 95pp; German.
 XX
 XX This invention relates to a novel optical fluorescent process to analyse
 XX nucleic acid chains. Using the method, a sample solid is bound with a
 XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
 XX are incorporated in the primer matrix by enzyme reaction, followed by
 XX washing of the solid phase. The marked nucleotides are detected and their
 XX co-ordinates logged and the signals removed. The marked nucleotides are
 XX detected and their co-ordinates logged and the signals removed. The solid
 XX phase is then washed and the sequence repeated as necessary. The Nucleic
 XX acid chain sequence is then reconstructed using the signals. The process
 XX is faster, more efficient and cheaper than prior art. The present
 XX sequence is that of oligonucleotide dt31-Si(O which was used in the
 XX development of the novel process of the invention.

SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;
 Matches 31; Conservative 0; Mismatches 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 78
 AEF94718/c
 ID AEF94718 standard; DNA; 31 BP.
 XX
 AC AEF94718;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Optical DNA analysis process-related oligonucleotide dt31-NH2.
 XX
 KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-NH2.
 XX
 OS Unidentified.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 31 /*tag= b
 FT /mod_base= 3'-NH2
 XX
 XX DE102004025696-A1.
 XX
 XX 23-FEB-2006.
 XX
 XX 26-MAY-2004; 2004DE-10025696.
 XX
 XX 26-MAY-2004; 2004DE-10025696.

XX (CHER/) CHERKASOV D.
 XX (HENN/) HENNIG C.
 XX (GENO-) GENOVORX GMBH.
 XX Cherkasov D, Hennig C, Baeuml E;
 XX WPI; 2006-185820/20.
 XX
 XX Ultra-high parallel analysis process to analyse nucleic acid chains in
 XX which a sample solid is bound and substrate material.

XX Example 5; Page 95; 141pp; German.
 XX
 XX This invention relates to a novel optical fluorescent process to analyse
 XX nucleic acid chains. Using the method, a sample solid is bound with a
 XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
 XX are incorporated in the primer matrix by enzyme reaction, followed by
 XX washing of the solid phase. The marked nucleotides are detected and their
 XX co-ordinates logged and the signals removed. The marked nucleotides are
 XX detected and their co-ordinates logged and the signals removed. The solid
 XX phase is then washed and the sequence repeated as necessary. The Nucleic
 XX acid chain sequence is then reconstructed using the signals. The process
 XX is faster, more efficient and cheaper than prior art. Further claimed is
 XX that the process is able to determine many sequences in parallel. The
 XX present sequence is that of oligonucleotide dt31-NH2 which was used in
 XX the development of the novel process of the invention.

SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;
 Matches 31; Conservative 0; Mismatches 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739

```

Db      31  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 79
AEF94723/c
ID  AEF94723 standard; DNA; 31 BP.
XX
AC  AEF94723;
XX
DT  20-APR-2006 (first entry)
XX
DE  Optical DNA analysis process-related oligonucleotide dT31-Si (O-Me)3.
XX
KW  ss; dna detection; DNA sequencing; DNA amplification; oligo dT31-Si (O.
XX
OS  Unidentified.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 31 /*tag= b
FT  /*mod_base= 3'-Si (O-Me)3
FT  31
FT  /*tag= b
FT  /*mod_base= 3'-NH2
XX
PN  DE102004025696-A1.
XX
PD  23-FEB-2006.
XX
PF  26-MAY-2004; 2004DE-10025696.
XX
PR  26-MAY-2004; 2004DE-10025696.
XX
XX  (CHER/) CHERKASOV D.
PA  (HENN/) HENNIG C.
PA  (GENO-) GENOVOXX GMBH.
XX
PI  Cherkasov D, Hennig C, Baeuml E;
XX
DR  WPI; 2006-185820/20.
XX
PT  Ultra-high parallel analysis process to analyse nucleic acid chains in
PT  which a sample solid is bound and substrate material.
XX
PS  Example 5; Page 95; 141pp; German.
XX
CC  This invention relates to a novel optical fluorescent process to analyse
CC  nucleic acid chains. Using the method, a sample solid is bound with a
CC  primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC  are incorporated in the primer matrix by enzyme reaction, followed by
CC  washing of the solid phase. The marked nucleotides are detected and their
CC  co-ordinates logged and the signals removed. The marked nucleotides are
CC  detected and their co-ordinates logged and the signals removed. The solid
CC  phase is then washed and the sequence repeated as necessary. The Nucleic
CC  acid chain sequence is then reconstructed using the signals. The process
CC  is faster, more efficient and cheaper than prior art. Further claimed is
CC  that the process is able to determine many sequences in parallel. The
CC  present sequence is that of oligonucleotide dT31-Si(O which was used in
CC  the development of the novel process of the invention.
XX
SQ  Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
DB  31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 80
AEF94717/c
ID  AEF94717 standard; DNA; 31 BP.
XX

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```

XX  AEF94717;
XX
DT  20-APR-2006 (first entry)
XX
DE  Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
XX
KW  ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-.
XX
OS  Unidentified.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 1 /*tag= b
FT  /*mod_base= 5'-Cy3
FT  31
FT  /*tag= b
FT  /*mod_base= 3'-NH2
XX
PN  DE102004025696-A1.
XX
PD  23-FEB-2006.
XX
PF  26-MAY-2004; 2004DE-10025696.
XX
PR  26-MAY-2004; 2004DE-10025696.
XX
XX  (CHER/) CHERKASOV D.
PA  (HENN/) HENNIG C.
PA  (GENO-) GENOVOXX GMBH.
XX
PI  Cherkasov D, Hennig C, Baeuml E;
XX
DR  WPI; 2006-185820/20.
XX
PT  Ultra-high parallel analysis process to analyse nucleic acid chains in
PT  which a sample solid is bound and substrate material.
XX
PS  Example 5; Page 95; 141pp; German.
XX
CC  This invention relates to a novel optical fluorescent process to analyse
CC  nucleic acid chains. Using the method, a sample solid is bound with a
CC  primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC  are incorporated in the primer matrix by enzyme reaction, followed by
CC  washing of the solid phase. The marked nucleotides are detected and their
CC  co-ordinates logged and the signals removed. The marked nucleotides are
CC  detected and their co-ordinates logged and the signals removed. The solid
CC  phase is then washed and the sequence repeated as necessary. The Nucleic
CC  acid chain sequence is then reconstructed using the signals. The process
CC  is faster, more efficient and cheaper than prior art. Further claimed is
CC  that the process is able to determine many sequences in parallel. The
CC  present sequence is that of oligonucleotide Cy3-dt31- which was used in
CC  the development of the novel process of the invention.
XX
SQ  Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
DB  31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 81
ADU05084
ID  ADU05084 standard; DNA; 33 BP.
XX
AC  ADU05084;
XX
DT  27-JAN-2005 (first entry)
XX

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XX DE Homopolymer tail with flexible linker for use with a capture probe.
XX KW severe acute respiratory syndrome; SARS; SARS-CoV; human coronavirus;
XX KW human coronavirus strain 229E; human coronavirus strain OC43;
XX KW SARS infection; ss.
XX OS Synthetic.
XX PN WO2004094675-A2.
XX XX
XX PD 04-NOV-2004.
XX XX
XX PF 16-APR-2004; 2004WO-US011636.
XX XX
XX PR 17-APR-2003; 2003US-0464049P.
XX PR 25-APR-2003; 2003US-0465428P.
XX PR 09-MAY-2003; 2003US-0469294P.
XX XX
XX PA (GENP-) GEN-PROBE INC.
XX XX
XX PI Linnen JM, Kacian DL, Nelson NC, Getman DK, Vijaysri S;
XX XX WPI; 2004-795575/78.
XX XX
XX XX Determining the presence of severe acute respiratory syndrome coronavirus
XX PT (SARS-CoV) in a test sample, useful for diagnosing SARS, comprises
XX PT contacting a test sample with a specific probe and determining hybrid
XX PT formation.
XX XX
XX PS Example 1; SEQ ID NO 39; 96pp; English.
XX XX
XX CC The specification describes a method for determining the presence of
XX CC severe acute respiratory syndrome coronavirus (SARS-CoV) in a test
XX CC sample. The method comprises contacting a test sample with a probe and
XX CC determining whether the hybrid is present in the test sample as an
XX CC indication of the presence of SARS-CoV in the test sample. The method is
XX CC useful for distinguishing the presence of SARS-CoV from that of human
XX CC coronavirus strains 229E and OC43. The method is useful for diagnosing
XX CC SARS or for monitoring the therapeutic treatment of a SARS-CoV-infected
XX CC individual. The detection probes of the invention are useful as
XX CC amplification oligonucleotides or helper oligonucleotides. The present
XX CC sequence represents a homopolymer tail with a flexible linker for use
XX CC with a capture probe of the invention.
XX XX
XX SQ Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 82
ADU83547
ID ADU83547 standard; DNA; 33 BP.
XX AC ADU83547;
XX XX
XX DT 10-FEB-2005 (first entry)
XX XX
XX DE Trichomonas vaginalis nucleic acid target capture probe.
XX XX ss; primer; PCR; detection; diagnosis.
XX OS Trichomonas vaginalis.
XX XX US2004235138-A1.
XX PN
XX PD 25-NOV-2004.

Query Match 1.1%; Score 31; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 83
ADV91960
ID ADV91960 standard; DNA; 33 BP.
XX AC ADV91960;
XX XX
XX DT 07-APR-2005 (first entry)
XX XX
XX DE Prostate cancer specific PCA3 probe SEQ ID NO 41.
XX XX DNA detection; diagnosis; prognosis; DNA amplification; prostatic cancer;
XX KW cytostatic; PCA3; probe; ss.
XX XX Homo sapiens.
XX XX WO2005003387-A2.
XX PN
XX PD 13-JAN-2005.
XX XX
XX PF 30-JUN-2004; 2004WO-EF007124.
XX XX
XX PR 30-JUN-2003; 2003CA-02432365.
XX XX
XX PA (UYME-) UNIV MEDICAL CENT NIJMEGEN.
XX XX
XX PI Schalken JA, Verhaegh G, Hesseels D, Smit F;
XX XX WPI; 2005-101505/11.
XX XX
XX DR Diagnosing or prognosing prostate cancer in a patient comprises
XX PT amplifying RNA on PCA3 gene using specific primers.
XX XX
XX PS Example 5; SEQ ID NO 41; 50pp; English.

```

```

XX PF 18-MAY-2004; 2004US-00848922.
XX XX
XX PR 19-MAY-2003; 2003US-0472028P.
XX XX
XX PA (WEIS/) WEISBURG W G.
XX PA (BUNG/) BUNGO J J.
XX XX
XX PI Weisburg WG, Bungo JU;
XX XX WPI; 2004-821327/81.
XX XX
XX PT New detection probe, useful for determining or screening for the presence
XX PT of Trichomonas vaginalis in a biological sample.
XX XX
XX PS Example 2; SEQ ID NO 98; 52pp; English.
XX XX
XX CC The invention relates to a detection probe, for determining the presence
XX CC of Trichomonas vaginalis in a test sample, the probe being up to 100
XX CC bases in length and comprising a target binding region which forms a
XX CC hybrid stable for detection with a sequence contained within any of the
XX CC 16 (first) target sequences of 26-32 bp under stringent hybridization
XX CC conditions, where the probe does not form a hybrid stable for detection
XX CC with nucleic acid derived from Trichomonas tenax under the cited
XX CC conditions. The detection probe, oligonucleotide, composition, methods,
XX CC and kits are useful for determining the presence of T. vaginalis in a
XX CC test sample. This sequence corresponds to a target capture probe for the
XX CC T. vaginalis DNA and used in the method of the invention.
XX XX
XX SQ Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 31; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 83
ADV91960
ID ADV91960 standard; DNA; 33 BP.
XX AC ADV91960;
XX XX
XX DT 07-APR-2005 (first entry)
XX XX
XX DE Prostate cancer specific PCA3 probe SEQ ID NO 41.
XX XX DNA detection; diagnosis; prognosis; DNA amplification; prostatic cancer;
XX KW cytostatic; PCA3; probe; ss.
XX XX Homo sapiens.
XX XX WO2005003387-A2.
XX PN
XX PD 13-JAN-2005.
XX XX
XX PF 30-JUN-2004; 2004WO-EF007124.
XX XX
XX PR 30-JUN-2003; 2003CA-02432365.
XX XX
XX PA (UYME-) UNIV MEDICAL CENT NIJMEGEN.
XX XX
XX PI Schalken JA, Verhaegh G, Hesseels D, Smit F;
XX XX WPI; 2005-101505/11.
XX XX
XX DR Diagnosing or prognosing prostate cancer in a patient comprises
XX PT amplifying RNA on PCA3 gene using specific primers.
XX XX
XX PS Example 5; SEQ ID NO 41; 50pp; English.

```

XX The invention describes diagnosing or prognosing prostate cancer in a
 CC patient comprising amplifying a prostate cancer specific PCA3 RNA using a
 CC pair of primers, and detecting an amplification product derived from it,
 CC where the amplification product is associated with a presence of prostate
 CC cancer or predisposition to prostate cancer in the patient. Also
 CC described is a diagnostic kit comprising a first container containing a
 CC first pair of primers designed to amplify a PCA3 RNA across an exon
 CC function of a PCA3 gene. The method and kit are useful for diagnosing or
 CC prognosing prostate cancer in a patient. This sequence represents a probe
 CC used to detect an exon-exon junction to detect PCA3 mRNA.

XX Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 SQ Query Match 1.1%; Score 31; DB 1; Length 33;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAA 2738
 Db 3 TAAAAA 33

RESULT 84

AAT93827/C

ID AAT93827 standard; DNA; 34 BP.

XX AAT93827;

XX 25-MAR-2003 (revised)

DT 24-FEB-1998 (first entry)

XX Antitumoural phosphodiester oligonucleotide 17 with cytotoxic activity.

XX Phosphodiester; selective binding; cell viability; growth;

KW tumoural cell line; cytotoxic activity; tumour cell; lymphoma;

KW Lymphoblastic tumour; ss.

XX Synthetic.

XX Key Location/Qualifiers

FH modified_base 1..34

FT /*tag= a

FT /note= "phosphodiester oligonucleotide"

XX W09720924-A1.

XX 12-JUN-1997.

XX 04-DEC-1996; 96WO-EP005388.

XX 04-DEC-1995; 95IT-MI002539.

XX (SAIC-) SAICOM SRL.

XX Scaggiante B, Quadrioglio F;

XX WPI; 1997-319771/29.

XX New phosphodiesteric oligonucleotide(s) - which exert a specific and

XX selective cytotoxic effect on tumour cells, for treating both solid and

XX liquid tumours.

XX Claim 10; Page 6; 38pp; English.

XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the
 CC generic formula, in the 3'-5' or 5'-3' direction: (Gat'a')a''-(Gbp'b')b''-
 CC (Gct'c')c''-(Gdt'd')d''-(Gef'e')e''-(Gtf'f')f''-(Gtg'g')g''-N', where: N and
 CC N' = T or G, equal or different from each other; x = 0-6, equal or
 CC different from each other; a, b, c, d, e, f, and g = 0-10, equal or
 CC different from each other; a', b', c', d', e', f', and g' = 0-30, equal
 CC or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-
 CC 16, equal or different from each other; The oligonucleotides are believed

CC to selectively bind and sequester some proteins which are essential to
 CC the viability and growth of tumoural cell line. They have specific and
 CC selective cytotoxic activity against tumour cells, and can be used for
 CC treating tumours of the liquid type, in particular of lymphoblastic
 CC origin, and of solid type, in particular lymphomas. The present
 CC phosphodiester oligonucleotide, at a concentration of 15 micromolar,
 CC reduced growth of CCRP-CEM tumoural cells by 71%, which is detectable 48
 CC hours after administration. (Updated on 25-MAR-2003 to correct PR field.)

XX Sequence 34 BP; 0 A; 0 C; 2 G; 32 T; 0 U; 0 Other;

SQ Query Match 1.1%; Score 30.8; DB 1; Length 34;

Best Local Similarity 94.1%; Pred. No. 1.8e+02;

Matches 32; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2706 ACTAAAAA 2739

Db 34 ACNAAAAA 1

RESULT 85

AAD27124

ID AAD27124 standard; RNA; 37 BP.

XX AAD27124;

XX 09-APR-2002 (first entry)

XX RNA template, (AU)3 used to direct RNA synthesis by HCV RNA polymerase.

XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;

KW lead compound; RNA polymerase; ss.

XX Unidentified.

XX US6322966-B1.

XX 27-NOV-2001.

XX 11-MAY-1999; 99US-00309670.

XX 11-MAY-1999; 99US-00309670.

XX (ZHON/) ZHONG W.

XX (HONG/) HONG Z.

XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;

XX WPI; 2002-096587/13.

XX Assay system for hepatitis C virus replicase activity comprises RNA
 CC template with unstable, small stemloop capable of forming copy-back
 CC structure, viral non-structural protein 5B, nucleoside triphosphates,
 CC buffer.

XX Example 1; Fig 2A; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis of
 CC HCV. This activity can be used to screen for anti-HCV replicase compounds
 CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.

XX The nucleic acid synthesised by NS5B is detected by evaluating an

CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, (AU)3 used to direct RNA synthesis by
 CC RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used
 CC in the exemplification of the invention

XX SQ Sequence 37 BP; 32 A; 0 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 1.1%; Score 30.8; DB 1; Length 37;
 Best Local Similarity 94.1%; Pred. No. 1.9e+02;
 Matches 32; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUA 36

RESULT 86

AAA79196

ID AAA79196 standard; DNA; 31 BP.

XX AC AAA79196;

XX 20-NOV-2000 (first entry)

DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:566.

XX Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
 KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
 KW phenotypic trait; genetic analysis; genetic mapping; ds.

XX Homo sapiens.

XX EP1024200-A2.

XX 02-AUG-2000.

PF 26-JAN-2000; 2000EP-00250023.

XX 27-JAN-1999; 99US-00238402.

XX (AFFY-) AFFYMETRIX INC.

PI Patil N, Shah N, Warrington JA;

XX WPI; 2000-500198/45.

XX Human genomic polymorphic nucleic acid segments, allele specific primers
 PT and probes, and methods of analysis, useful for e.g. forensics, paternity
 PT testing, genetic mapping,.

XX Claim 1; Page 21; 141pp; English.

XX The present invention describes a nucleic acid segment of 10-100
 CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
 CC where the segment comprises a polymorphic site or an immediately adjacent
 CC base, or the complement of the segment. Also described are: (1) an allele
 CC -specific oligonucleotide that hybridises to a segment of the novelty;
 CC (2) an isolated nucleic acid comprising a sequence of the novelty where
 CC the polymorphic site within the sequence is occupied by a base other than
 CC the reference base indicated in the specification; and (3) analysing a
 CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
 CC determining a base occupying any one of the polymorphic sites of the
 CC novelty. The nucleic acid segments and method can be used to analyse an
 CC individuals nucleic acid sequences for the presence of polymorphisms. The
 CC method can also be used to test for a disease phenotype and correlate the
 CC presence of the phenotype with a particular polymorphism. The presence of
 CC polymorphic sites are useful for, e.g. forensics, paternity testing,
 CC correlation of polymorphisms with phenotypic traits and for genetic
 CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
 CC tags of human genomic DNA fragments containing polymorphic sites. The
 CC base occupying the polymorphic site is indicated using IUPAC-IUB
 CC nomenclature

XX

SQ Sequence 31 BP; 9 A; 9 C; 6 G; 6 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
 Best Local Similarity 96.8%; Pred. No. 1.8e+02;
 Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1716 TACTGCTGAAGAAACACCATTTACTGAGGCC 1746
 |||||
 Db 1 TACTGCTGAAGAAACACCATTTACTGAGGCC 31

RESULT 87

AAA79197

ID AAA79197 standard; DNA; 31 BP.

XX AC AAA79197;

XX 20-NOV-2000 (first entry)

DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:567.

XX Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
 KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
 KW phenotypic trait; genetic analysis; genetic mapping; ds.

XX Homo sapiens.

XX EP1024200-A2.

XX 02-AUG-2000.

XX 26-JAN-2000; 2000EP-00250023.

XX 27-JAN-1999; 99US-00238402.

XX (AFFY-) AFFYMETRIX INC.

PI Patil N, Shah N, Warrington JA;

XX WPI; 2000-500198/45.

XX Human genomic polymorphic nucleic acid segments, allele specific primers
 PT and probes, and methods of analysis, useful for e.g. forensics, paternity
 PT testing, genetic mapping,.

XX Claim 1; Page 21; 141pp; English.

XX The present invention describes a nucleic acid segment of 10-100
 CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
 CC where the segment comprises a polymorphic site or an immediately adjacent
 CC base, or the complement of the segment. Also described are: (1) an allele
 CC -specific oligonucleotide that hybridises to a segment of the novelty;
 CC (2) an isolated nucleic acid comprising a sequence of the novelty where
 CC the polymorphic site within the sequence is occupied by a base other than
 CC the reference base indicated in the specification; and (3) analysing a
 CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
 CC determining a base occupying any one of the polymorphic sites of the
 CC novelty. The nucleic acid segments and method can be used to analyse an
 CC individuals nucleic acid sequences for the presence of polymorphisms. The
 CC method can also be used to test for a disease phenotype and correlate the
 CC presence of the phenotype with a particular polymorphism. The presence of
 CC polymorphic sites are useful for, e.g. forensics, paternity testing,
 CC correlation of polymorphisms with phenotypic traits and for genetic
 CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
 CC tags of human genomic DNA fragments containing polymorphic sites. The
 CC base occupying the polymorphic site is indicated using IUPAC-IUB
 CC nomenclature

SQ Sequence 31 BP; 8 A; 4 C; 10 G; 8 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
 Best Local Similarity 96.8%; Pred. No. 1.8e+02;
 Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;


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QY 2201 AAAAGACTGGCTCCTTGGTGGATGAGTTTA 2231
Db 1 AAAAGACTGGCTCCTTGGTGGATGAGTTTA 31

RESULT 88
AAA79195
ID AAA79195 standard; DNA; 31 BP.
AC
AC AAA79195;
XX
XX 20-NOV-2000 (first entry)
XX
XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:565.
DE
DE Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
XX Homo sapiens.
OS
XX
XX EP1024200-A2.
PN
XX
XX 02-AUG-2000.
PD
XX
XX 26-JAN-2000; 2000EP-00250023.
PF
XX
XX 27-JAN-1999; 99US-00238402.
PR
XX
XX (AFFY-) AFFYMETRIX INC.
PA
XX
XX Patil N, Shah N, Warrington JA;
PI
XX
XX WPI; 2000-500198/45.
DR
XX
XX Human genomic polymorphic nucleic acid segments, allele specific primers
PT and probes, and methods of analysis, useful for e.g. forensics, paternity
PT testing, genetic mapping,.
XX
XX Claim 1; Page 21; 141pp; English.
XX
XX The present invention describes a nucleic acid segment of 10-100
CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
CC where the segment comprises a polymorphic site or an immediately adjacent
CC base, or the complement of the segment. Also described are: (1) an allele
CC -specific oligonucleotide that hybridises to a segment of the novelty;
CC (2) an isolated nucleic acid comprising a sequence of the novelty where
CC the polymorphic site within the sequence is occupied by a base other than
CC the reference base indicated in the specification; and (3) analysing a
CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
CC determining a base occupying any one of the polymorphic sites of the
CC individuals nucleic acid sequences for the presence of polymorphisms. The
CC method can also be used to test for a disease phenotype and correlate the
CC presence of the phenotype with a particular polymorphism. The presence of
CC polymorphic sites are useful for, e.g. forensics, paternity testing,
CC correlation of polymorphisms with phenotypic traits and for genetic
CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
CC tags of human genomic DNA fragments containing polymorphic sites. The
CC base occupying the polymorphic site is indicated using IUPAC-IUB
CC nomenclature
XX
XX Sequence 31 BP; 8 A; 8 C; 7 G; 7 T; 0 U; 1 Other;
SQ
Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1592 CCTAGCGATACCAAGAGGTCTCAGATCTATG 1622
Db 1 CCTAGCGATACCAAGAGGTCTCAGATCTATG 31

RESULT 89
AAA79199
ID AAA79199 standard; DNA; 31 BP.
AC
AC AAA79199;
XX
XX 20-NOV-2000 (first entry)
XX
XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:569.
DE
DE Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
XX Homo sapiens.
OS
XX
XX EP1024200-A2.
PN
XX
XX 02-AUG-2000.
PD
XX
XX 26-JAN-2000; 2000EP-00250023.
PF
XX
XX 27-JAN-1999; 99US-00238402.
PR
XX
XX (AFFY-) AFFYMETRIX INC.
PA
XX
XX Patil N, Shah N, Warrington JA;
PI
XX
XX WPI; 2000-500198/45.
DR
XX
XX Human genomic polymorphic nucleic acid segments, allele specific primers
PT and probes, and methods of analysis, useful for e.g. forensics, paternity
PT testing, genetic mapping,.
XX
XX Claim 1; Page 21; 141pp; English.
XX
XX The present invention describes a nucleic acid segment of 10-100
CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
CC where the segment comprises a polymorphic site or an immediately adjacent
CC base, or the complement of the segment. Also described are: (1) an allele
CC -specific oligonucleotide that hybridises to a segment of the novelty;
CC (2) an isolated nucleic acid comprising a sequence of the novelty where
CC the polymorphic site within the sequence is occupied by a base other than
CC the reference base indicated in the specification; and (3) analysing a
CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
CC determining a base occupying any one of the polymorphic sites of the
CC individuals nucleic acid sequences for the presence of polymorphisms. The
CC method can also be used to test for a disease phenotype and correlate the
CC presence of the phenotype with a particular polymorphism. The presence of
CC polymorphic sites are useful for, e.g. forensics, paternity testing,
CC correlation of polymorphisms with phenotypic traits and for genetic
CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
CC tags of human genomic DNA fragments containing polymorphic sites. The
CC base occupying the polymorphic site is indicated using IUPAC-IUB
CC nomenclature
XX
XX Sequence 31 BP; 9 A; 4 C; 14 G; 3 T; 0 U; 1 Other;
SQ
Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2419 CGGGCTGAAGAGTGGTCTGAAGAGCAGGAG 2449
Db 1 CGGGCTGAAGAGTGGTCTGAAGAGCAGGAG 31

RESULT 90
AAA79193
ID AAA79193 standard; DNA; 31 BP.
XX
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AC AAA79193;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:563.
XX
KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
OS Homo sapiens.
XX
PN EPI024200-A2.
XX
PD 02-AUG-2000.
XX
PF 26-JAN-2000; 2000EP-00250023.
XX
PR 27-JAN-1999; 99US-00238402.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Patil N, Shah N, Warrington JA;
XX
DR WPI; 2000-500198/45.
XX
PT Human genomic polymorphic nucleic acid segments, allele specific primers
PT and probes, and methods of analysis, useful for e.g. forensics, paternity
PT testing, genetic mapping,.
XX
PS Claim 1; Page 21; 141pp; English.
XX
CC The present invention describes a nucleic acid segment of 10-100
CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
CC where the segment comprises a polymorphic site or an immediately adjacent
CC base, or the complement of the segment. Also described are: (1) an allele
CC -specific oligonucleotide that hybridises to a segment of the novelty;
CC (2) an isolated nucleic acid comprising a sequence of the novelty where
CC the polymorphic site within the sequence is occupied by a base other than
CC the reference base indicated in the specification; and (3) analysing a
CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
CC determining a base occupying any one of the polymorphic sites of the
CC novelty. The nucleic acid segments and method can be used to analyse an
CC individuals nucleic acid sequences for the presence of polymorphisms. The
CC method can also be used to test for a disease phenotype and correlate the
CC presence of the phenotype with a particular polymorphism. The presence of
CC polymorphic sites are useful for, e.g. forensics, paternity testing,
CC correlation of polymorphisms with phenotypic traits and for genetic
CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
CC tags of human genomic DNA fragments containing polymorphic sites. The
CC base occupying the polymorphic site is indicated using IUPAC-IUB
CC nomenclature
XX
SQ Sequence 31 BP; 5 A; 6 C; 8 G; 11 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 777 TGGTTGATGCTCCAGGCTATGTTGAATC 807
DB 1 TGGTTGATGCTCCAGGCTATGTTGAATC 31

RESULT 91
AAA79198
ID AAA79198 standard; DNA; 31 BP.
XX
AC AAA79198;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:568.
XX

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XX
KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
OS Homo sapiens.
XX
PN EPI024200-A2.
XX
PD 02-AUG-2000.
XX
PF 26-JAN-2000; 2000EP-00250023.
XX
PR 27-JAN-1999; 99US-00238402.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Patil N, Shah N, Warrington JA;
XX
DR WPI; 2000-500198/45.
XX
PT Human genomic polymorphic nucleic acid segments, allele specific primers
PT and probes, and methods of analysis, useful for e.g. forensics, paternity
PT testing, genetic mapping,.
XX
PS Claim 1; Page 21; 141pp; English.
XX
CC The present invention describes a nucleic acid segment of 10-100
CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
CC where the segment comprises a polymorphic site or an immediately adjacent
CC base, or the complement of the segment. Also described are: (1) an allele
CC -specific oligonucleotide that hybridises to a segment of the novelty;
CC (2) an isolated nucleic acid comprising a sequence of the novelty where
CC the polymorphic site within the sequence is occupied by a base other than
CC the reference base indicated in the specification; and (3) analysing a
CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
CC determining a base occupying any one of the polymorphic sites of the
CC novelty. The nucleic acid segments and method can be used to analyse an
CC individuals nucleic acid sequences for the presence of polymorphisms. The
CC method can also be used to test for a disease phenotype and correlate the
CC presence of the phenotype with a particular polymorphism. The presence of
CC polymorphic sites are useful for, e.g. forensics, paternity testing,
CC correlation of polymorphisms with phenotypic traits and for genetic
CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
CC tags of human genomic DNA fragments containing polymorphic sites. The
CC base occupying the polymorphic site is indicated using IUPAC-IUB
CC nomenclature
XX
SQ Sequence 31 BP; 9 A; 7 C; 5 G; 9 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2228 TTTAAGAGCTTGTTCACCCAGATTACA 2258
DB 1 TTTAAGAGCTTGTTCACCCAGATTACA 31

RESULT 92
AAA79194
ID AAA79194 standard; DNA; 31 BP.
XX
AC AAA79194;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:564.
XX
KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX

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OS Homo sapiens.
XX
XX BP1024200-A2.
XX
XX PD 02-AUG-2000.
XX
XX PF 26-JAN-2000; 2000EP-00250023.
XX
XX PR 27-JAN-1999; 99US-00238402.
XX
XX (AFFY-) AFFYMETRIX INC.
XX
XX PI Patil N, Shah N, Warrington JA;
XX
XX WPI; 2000-500198/45.
XX
XX Human genomic polymorphic nucleic acid segments, allele specific primers
XX PT and probes, and methods of analysis, useful for e.g. forensics, paternity
XX PT testing, genetic mapping.
XX
XX PS Claim 1; Page 21; 141pp; English.
XX
XX The present invention describes a nucleic acid segment of 10-100
XX CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
XX CC where the segment comprises a polymorphic site or an immediately adjacent
XX CC base, or the complement of the segment. Also described are: (1) an allele
XX CC -specific oligonucleotide that hybridises to a segment of the novelty;
XX CC (2) an isolated nucleic acid comprising a sequence of the novelty where
XX CC the polymorphic site within the sequence is occupied by a base other than
XX CC the reference base indicated in the specification; and (3) analysing a
XX CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
XX CC determining a base occupying any one of the polymorphic sites of the
XX CC novelty. The nucleic acid segments and method can be used to analyse an
XX CC individuals nucleic acid sequences for the presence of polymorphisms. The
XX CC method can also be used to test for a disease phenotype and correlate the
XX CC presence of the phenotype with a particular polymorphism. The presence of
XX CC polymorphic sites are useful for, e.g. forensics, paternity testing,
XX CC correlation of polymorphisms with phenotypic traits and for genetic
XX CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
XX CC tags of human genomic DNA fragments containing polymorphic sites. The
XX CC base occupying the polymorphic site is indicated using IUPAC-IUB
XX CC nomenclature
XX
XX SQ Sequence 31 BP; 4 A; 6 C; 8 G; 12 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1457 GTGATCTCTGTGGCATTATTAATCTGGTCC 1487
Db 1 GTGATCTCTGTGGCATTATTAATCTGGTCC 31

RESULT 93
ACD43584
ID ACD43584 standard; DNA; 31 BP.
XX
XX ACD43584;
XX
XX DT 09-SEP-2003 (first entry)
XX
XX Human gene single nucleotide polymorphism region #18.
XX
XX Human; single nucleotide polymorphism; SNP; forensic; paternity testing;
XX KW genetic mapping of phenotypic trait; da.
XX
XX OS Homo sapiens.
XX
XX US2003039973-A1.
XX
XX PD 27-FEB-2003.
XX

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PF 24-JUL-2001; 2001US-00912263.
XX
XX PR 24-JUL-2000; 2000US-0220315P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
XX PI Cargill M, Ireland JS, Lander ES;
XX
XX WPI; 2003-492161/46.
XX
XX New nucleic acids comprising single nucleotide polymorphisms, useful in
XX PT forensics (e.g. to identify an individual), paternity testing,
XX PT correlating polymorphisms with phenotypic traits, and genetic mapping of
XX PT phenotypic traits.
XX
XX PS Example; Page 10; 48pp; English.
XX
XX The invention describes a nucleic acid molecule comprising one of 525 31
XX CC nucleotide sequences, given in the specification, or at least 10
XX CC nucleotides in length, and comprising a polymorphic site, where the
XX CC nucleotide at the polymorphic site is different from a nucleotide at the
XX CC polymorphic site in a corresponding reference allele. The nucleic acids
XX CC comprising a single nucleotide polymorphism are useful in forensics (e.g.
XX CC to identify an individual), in paternity testing, in correlating
XX CC polymorphisms with phenotypic traits, and in genetic mapping of
XX CC phenotypic traits. The correlation between a particular polymorphic form
XX CC of a gene and a phenotype can be used in the diagnosis of that phenotype,
XX CC as well as in the development of treatments for the phenotype. This
XX CC sequence represents a fragment of a human gene found to containing a
XX CC single nucleotide polymorphism following re-sequencing. The regions can
XX CC be used to develop primers and probes for use in detect the SNP regions
XX CC in individuals
XX
XX SQ Sequence 31 BP; 4 A; 6 C; 8 G; 12 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1457 GTGATCTCTGTGGCATTATTAATCTGGTCC 1487
Db 1 GTGATCTCTGTGGCATTATTAATCTGGTCC 31

RESULT 94
ACF04897/c
ID ACF04897 standard; DNA; 32 BP.
XX
XX ACF04897;
XX
XX DT 12-FEB-2004 (first entry)
XX
XX Human beta-actin gene PCR primer #2.
XX
XX Human; urine sample analysis; kidney disease; glomerulonephritis;
XX KW nephrotic syndrome; diabetes; lupus; hypertension; beta-actin;
XX KW acute tubular necrosis; renal cancer; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX WO2003082202-A2.
XX
XX PD 09-OCT-2003.
XX
XX PF 27-MAR-2003; 2003WO-US009389.
XX
XX PR 28-MAR-2002; 2002US-00108969.
XX
XX (UNMI ) UNIV MICHIGAN.
XX
XX PI Kurnit DM;
XX
XX WPI; 2003-833515/77.
XX

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CC useful in the diagnosis of pathological conditions. The method enables
CC preparation of cellular gene expression profile from an extremely small
CC number of cells, pathological samples, micro tissues, etc., whose
CC handling has been infeasible because of limited sample amount. The gene-
CC expression profile can be obtained from trace amounts of sample by
CC improved high coverage gene-expression profile analysis method. The
CC method has high detection sensitivity with respect to gene expression.
CC The present sequence represents a cDNA first strand synthesis primer.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 31 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 97
AAS09500/c
ID AAS09500 standard; DNA; 32 BP.
XX
AC AAS09500;
XX
DT 24-OCT-2001 (first entry)
XX
DE SMART PCR primer #2.
XX
KW Heat-labile uracil-DNA glycosylase; UNG; UDG; PCR primer; SMART;
KW PCR control; LCR control; ligase chain reaction; carry-over prevention;
KW ss.
XX
OS Synthetic.
XX
PN WO200151623-A1.
XX
PD 19-JUL-2001.
XX
PF 10-JAN-2001; 2001WO-N0000008.
XX
PR 12-JAN-2000; 2000NO-00000163.
XX
PT 27-OCT-2000; 2000NO-00005428.
XX
PA (BIOT-) BIOTEC ASA.
XX
PI Lanes O, Willasen NP, Guddal PH, Gjellesvik DR;
XX
DR WPI; 2001-451854/48.
XX
CC New cod liver uracil-DNA glycosylase enzyme, useful in monitoring or
CC controlling a reaction system multiplying DNA sequences or in carry-over
CC prevention procedures.
XX
PS Example 2; Page 20; 59pp; English.
XX
CC The sequence represents a SMART PCR primer used to synthesise first
CC strand cDNA from Atlantic cod in order to isolate cDNAs encoding heat-
CC labile uracil-DNA glycosylase, (UNG/UDG). The enzyme is useful in
CC monitoring and/or controlling a reaction system multiplying DNA
CC sequences, e.g. PCR (polymerase chain reaction) or LCR (ligase chain
CC reaction). The enzyme is also useful in carry-over prevention procedures
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 2 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 32;
Best Local Similarity 93.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAA.....AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 32 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 98
ABA01204/c
ID ABA01204 standard; DNA; 32 BP.
XX
AC ABA01204;
XX
DT 11-SEP-2003 (revised)
DT 28-JAN-2002 (first entry)
XX
DE Mamushi fibrinolytic enzyme, brevinase, PCR primer, BBRP1.
XX
KW Fibrinolytic enzyme; brevinase; thermostable; thrombolytic agent;
KW mamushi; PCR primer; ss.
XX
OS Agkistrodon blomhoffi; brevicaudus.
XX
PN KR2001045716-A.
XX
PD 05-JUN-2001.
XX
PF 06-NOV-1999; 99KR-00049115.
XX
PR 06-NOV-1999; 99KR-00049115.
XX
PA (LEBJ/) LEE J W.
XX
PI (PARK/) PARK W.
XX
PI Lee JW, Park W;
XX
DR WPI; 2001-636862/73.
XX
PT Fibrinolytic enzyme, brevinase, separated from poison of viper,
PT agkistrodon blomhoffi brevicaudus.
XX
PS Example 5; Page 6; 23pp; Korean.
XX
CC The present invention relates to fibrinolytic enzyme, brevinase (see
CC AAG79000), which is separated from the poison of Agkistrodon blomhoffi
CC brevicaudus (mamushi). The enzyme shows stability at high temperatures
CC and is thus useful in developing thrombolytic agents. The present
CC sequence is a PCR primer, which was used in an example from the present
CC invention. (Updated on 11-SEP-2003 to standardise OS field)
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 2 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 32;
Best Local Similarity 96.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 31 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 99
AAN70277/c
ID AAN70277 standard; DNA; 30 BP.
XX
AC AAN70277;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC064 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN EP227976-A.
XX
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XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX DR WPI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Example 6; Page 60; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 105
AAF99888/c
ID AAF99888 standard; DNA; 30 BP.
AC AAF99888;
XX 12-JUN-2001 (first entry)
XX DE Immunostimulatory nucleic acid #1004.
XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX KW immunostimulatory; tumour; viral infection; bacterial infection;
XX KW fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.

```

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XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX DR WPI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Example 6; Page 60; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 106
ABK10416
ID ABK10416 standard; DNA; 30 BP.
XX ABK10416;
XX 21-MAY-2002 (first entry)
XX DE Synthetic primer sequence 5'-A30-3'.
XX KW ss; 5'-A30-3'; double stranded DNA generation; promiscuous base;
XX KW target molecule; primer.
XX OS Synthetic.
XX PN US6326143-B1.
XX PD 04-DEC-2001.
XX PF 22-MAY-1998; 98US-00083123.
XX PR 22-NOV-1996; 96WO-EP005149.
XX PA (HOFF ) ROCHE DIAGNOSTICS GMBH.
XX PI Orum H, Seeger C;
XX DR WPI; 2002-214947/27.
XX PT Determining an analyte in a sample, for generating multiple double

```

PT stranded nucleic acids, comprises employing a single primer sequence with
PT a nucleobase sequence having affinity to the sequence contained in a
PT target nucleic acid.

XX Example 1; Col 14; 25pp; English.

XX The invention relates to determining an analyte in a sample comprising
CC (a) providing a target nucleic acid comprising a region A, a nucleobase
CC sequence B, and a sequence I linked to the 5' terminus of the nucleobase
CC sequence B, where the nucleobase sequence B is not specific for the
CC analyte, and the region A specifically binds to the analyte, (b) binding
CC the target nucleic acid to the analyte, separating the analyte bound to
CC the target nucleic acid from the remaining part of the sample, (d)
CC hybridising a primer to the target nucleic acid, where the primer
CC comprises a nucleobase sequence B', and the nucleobase sequence B'
CC hybridises to the nucleobase sequence B, (e) elongating the hybridised
CC primer to produce an elongation product E using the target nucleic acid
CC as a template and using nucleotides, where at least 30 % of the
CC nucleotides contain at least one promiscuous base which is capable of
CC base pairing with each of adenine, guanine, cytosine, and thymine, (f)
CC separating the target nucleic acid from the elongation product E, (g)
CC hybridising a further primer which comprises the nucleobase sequence B'
CC to the elongation product E, where the elongation product E is capable of
CC acting as a template for the elongation of the further primer, (h)
CC elongating the hybridised further primer of step (g) to produce an
CC elongation product E', using the elongation product E as a template and
CC using nucleotides, where at least 30 % of the nucleotides contain at
CC least one promiscuous base, (i) separating the elongation product E from
CC the elongation product E', (j) hybridising a further primer comprising a
CC nucleobase sequence B' to the target nucleic acid or the elongation
CC product E, (k) elongating the further primer of step (j) to produce
CC another elongation product E using the target nucleic acid or elongation
CC product E as a template and using nucleotides, where at least 30 % of the
CC nucleotides contain at least one promiscuous base, (l) separating product
CC E of step (k) from the target nucleic acid or elongation product E, (m)
CC optionally repeating steps (g) - (l) a sufficient number of times to
CC generate a desired amount of double stranded nucleic acids and (n)
CC determining the elongation product E and/or elongation product E' as a
CC measure of the presence or amount of the analyte, where the lengths of
CC the sequence I and the nucleobase sequence B are chosen such that, when
CC the further primer hybridises to the elongation product E in step (g),
CC the further primer spans a sequence formed by elongation of the
CC hybridised primer of step (e) and overlaps at least a part of the 3'
CC region of the hybridized primer of step (e) by an overlap length. The
CC method is useful for determining an analyte in a sample. In particular, the
CC method is useful for generating multiple double stranded nucleic acids.
CC The present sequence is a primer molecule used to exemplify the method of
CC the invention

XX Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

SQ Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 107

ABK10412/c

ID ABK10412 standard; DNA; 30 BP.

XX ABK10412;

XX 21-MAY-2002 (first entry)

XX Synthetic primer sequence 5'-T30-3'.

XX ss; 5'-T30-3'; double stranded DNA generation; promiscuous base;
KW target molecule; primer.

XX

OS Synthetic.

XX US6326143-B1.

XX 04-DEC-2001.

XX 22-MAY-1998; 98US-00083123.

XX 22-NOV-1996; 96WO-EP005149.

XX (HOPF) ROCHE DIAGNOSTICS GMBH.

XX Orum H, Seeger C;

XX WPI; 2002-214947/27.

XX Determining an analyte in a sample, for generating multiple double
PT stranded nucleic acids, comprises employing a single primer sequence with
PT a nucleobase sequence having affinity to the sequence contained in a
PT target nucleic acid.

XX Example 1; Col 14; 25pp; English.

XX The invention relates to determining an analyte in a sample comprising
CC (a) providing a target nucleic acid comprising a region A, a nucleobase
CC sequence B, and a sequence I linked to the 5' terminus of the nucleobase
CC sequence B, where the nucleobase sequence B is not specific for the
CC analyte, and the region A specifically binds to the analyte, (b) binding
CC the target nucleic acid to the analyte, separating the analyte bound to
CC the target nucleic acid from the remaining part of the sample, (d)
CC hybridising a primer to the target nucleic acid, where the primer
CC comprises a nucleobase sequence B', and the nucleobase sequence B'
CC hybridises to the nucleobase sequence B, (e) elongating the hybridised
CC primer to produce an elongation product E using the target nucleic acid
CC as a template and using nucleotides, where at least 30 % of the
CC nucleotides contain at least one promiscuous base which is capable of
CC base pairing with each of adenine, guanine, cytosine, and thymine, (f)
CC separating the target nucleic acid from the elongation product E, (g)
CC hybridising a further primer which comprises the nucleobase sequence B'
CC to the elongation product E, where the elongation product E is capable of
CC acting as a template for the elongation of the further primer, (h)
CC elongating the hybridised further primer of step (g) to produce an
CC elongation product E', using the elongation product E as a template and
CC using nucleotides, where at least 30 % of the nucleotides contain at
CC least one promiscuous base, (i) separating the elongation product E from
CC the elongation product E', (j) hybridising a further primer comprising a
CC nucleobase sequence B' to the target nucleic acid or the elongation
CC product E, (k) elongating the further primer of step (j) to produce
CC another elongation product E using the target nucleic acid or elongation
CC product E as a template and using nucleotides, where at least 30 % of the
CC nucleotides contain at least one promiscuous base, (l) separating product
CC E of step (k) from the target nucleic acid or elongation product E, (m)
CC optionally repeating steps (g) - (l) a sufficient number of times to
CC generate a desired amount of double stranded nucleic acids and (n)
CC determining the elongation product E and/or elongation product E' as a
CC measure of the presence or amount of the analyte, where the lengths of
CC the sequence I and the nucleobase sequence B are chosen such that, when
CC the further primer hybridises to the elongation product E in step (g),
CC the further primer spans a sequence formed by elongation of the
CC hybridised primer of step (e) and overlaps at least a part of the 3'
CC region of the hybridized primer of step (e) by an overlap length. The
CC method is useful for determining an analyte in a sample. In particular, the
CC method is useful for generating multiple double stranded nucleic acids.
CC The present sequence is a primer molecule used to exemplify the method of
CC the invention

SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738


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KW bi-fluorescent probe; ss.
XX Synthetic.
XX US2004220397-A1.
XX 04-NOV-2004.
XX
XX 21-APR-2004; 2004US-00830484.
XX
XX 21-APR-2003; 2003US-0464269P.
XX (PROL-) PROLIGO LLC.
XX
XX Leuck M, Wolter A;
XX WPI; 2004-794500/78.
XX
XX Preparation of 3'-amino oligonucleotide derivatives, useful to synthesis
PT bi-fluorescent probes, comprises providing solid support compounds,
PT synthesis an oligonucleotide chain is assembled on the solid support,
PT cleavage and deprotection.
XX
XX Example 8; Page 16; 25pp; English.
XX
XX The invention relates to the preparation of 3'-amino oligonucleotide
XX derivatives. The method comprises providing solid support benzene
XX derivatives, synthesising an oligonucleotide pursuant to standard
XX techniques for solid phase oligonucleotide synthesis (SPOS) where the
XX oligonucleotide chain is assembled on the solid support, cleaving the
XX oligonucleotide from the solid support and deprotecting the
XX oligonucleotide completely except for the terminal protective group. The
XX solid phase is a derivatised controlled pore glass (CPG). The 3'-amino
XX oligonucleotides are useful in the synthesis of bi-fluorescent probes.
XX This process suppresses the undesired formation of unmodified 3'-OH
XX oligonucleotides through cyclic phosphate intermediates and reduces the
XX probability of errors resulting from the use of different reagents for
XX different sets of oligonucleotides. This sequence represents an
XX oligonucleotide synthesised in the examples of the present invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 111
ADV98265/c
ID ADV98265 standard; DNA; 30 BP.
XX
XX ADV98265;
AC
XX 24-FEB-2005 (first entry)
DT
XX
XX Microarray associated oligonucleotide SEQ ID NO 9.
DE
XX
XX microarray; DNA detection; hybridization; ss.
KW
XX Synthetic.
OS
XX KR2004076201-A.
XX
XX 31-AUG-2004.
XX
XX 04-FEB-2004; 2004KR-00007237.
XX
XX 24-FEB-2003; 2003KR-00006722.
XX
PA (KIMC/) KIM C M.
PA (PARK/) PARK H K.
XX
XX Jang HJ, Kim CM, Park HK;
XX
XX WPI; 2005-055129/06.
XX
XX Microarray comprising QC probes and method for fabricating the same.
XX
XX Example 2; SEQ ID NO 9; 17pp; Korean.
XX
XX The invention describes a microarray comprising QC probes and a method
XX for fabricating the microarray. The microarray comprising QC probes has
XX the complementary nucleotide sequence with that of a target gene or any
XX nucleotide sequence labeled with a fluorescence material which is
XX different from the fluorescence material labeled to the target gene,
XX wherein the fluorescence material is labeled at the 3'-terminal, 5'-
XX terminal or intermediate of the QC probes; a spacer is further contained
XX between the nucleotide sequence of the probes and fluorescence material;
XX the QC probes can be cDNA, oligonucleotides, peptides or proteins. The
XX method for fabricating the microarray comprising QC probes involves
XX fixing the QC probes or a mixture of QC probes and target probe on a
XX substrate, wherein the QC probes and target probe are fixed in a spot at
XX the same time. This sequence represents an oligonucleotide associated
XX with the microarray of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 112
AED67969
ID AED67969 standard; DNA; 30 BP.
XX
XX AED67969;
AC
XX 12-JAN-2006 (first entry)
DT
XX
XX Staphylococcus aureus Meca gene specific probe 1 SEQ ID: 25 #2.
DE
XX
XX Analyte detection; DNA detection; protein detection; Meca gene; probe;
KW ss.
XX
XX Staphylococcus aureus.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..30
FT /*tag= a
FT /mod_base= OTHER
FT /note="OTHER= Linked to gold-S' where S' indicates a
FT connecting unit prepared via an epiandrosterone disulfide
FT group"
XX
XX US2005250094-A1.
XX
XX 10-NOV-2005.
XX
XX 22-NOV-2004; 2004US-00995051.
XX
XX 30-MAY-2003; 2003US-0474569P.
XX
XX 29-AUG-2003; 2003US-0499034P.
XX
XX 04-NOV-2003; 2003US-0517450P.
XX
XX 03-MAY-2004; 2004US-0567874P.
XX
XX 27-MAY-2004; 2004US-00854848.
XX
XX (NANO-) NANOSPHERE INC.

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XX PI Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX WPI; 2005-784662/80.
XX
XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX sample, comprises contacting sample with one or more types of
XX nanoparticle having target binding complements, and detecting any light
XX scattering complex formed.
XX
XX Example 25; SEQ ID NO 25; 70pp; English.
XX
XX The present invention provides a method for detecting the presence or
XX absence of a single target molecule or target analyte (e.g. nucleic acid,
XX protein, lipid, bacterium). The method involves contacting sample with
XX one or more types of nanoparticle having target binding complements and
XX detecting any light scattering complex formed. The nanoparticle probe
XX complexes comprise two or more probes bound to a specific target analyte.
XX The present sequence is a Staphylococcus aureus MecA gene specific probe.
XX This sequence is used in the preparation of nanoparticle-oligonucleotide
XX conjugate probes. Note: The present sequence is the SEQ ID NO: 25 shown
XX on page 25 in example 25 of the specification. This sequence differs from
XX the SEQ ID NO: 25 given in the sequence listing (see AED67954).
XX
XX Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
XX |
XX 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30
XX
XX RESULT 113
XX AED67958
XX ID AED67958 standard; DNA; 30 BP.
XX AC AED67958;
XX
XX DT 12-JAN-2006 (first entry)
XX
XX DE Methicillin resistant S. aureus MecA gene specific probe 1 SEQ ID: 29.
XX
XX KW Analyte detection; DNA detection; protein detection; MecA gene; probe;
XX ss.
XX
XX OS Staphylococcus aureus.
XX
XX PN US2005250094-A1.
XX
XX PD 10-NOV-2005.
XX
XX PF 22-NOV-2004; 2004US-00995051.
XX
XX PR 30-MAY-2003; 2003US-0474569P.
XX PR 29-AUG-2003; 2003US-0499034P.
XX PR 04-NOV-2003; 2003US-0517450P.
XX PR 03-MAY-2004; 2004US-0567874P.
XX PR 27-MAY-2004; 2004US-00854848.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX PI Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX WPI; 2005-784662/80.
XX
XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX sample, comprises contacting sample with one or more types of
XX nanoparticle having target binding complements, and detecting any light
XX scattering complex formed.
XX
```

```
PS Example 25; SEQ ID NO 29; 70pp; English.
XX
XX The present invention provides a method for detecting the presence or
XX absence of a single target molecule or target analyte (e.g. nucleic acid,
XX protein, lipid, bacterium). The method involves contacting sample with
XX one or more types of nanoparticle having target binding complements and
XX detecting any light scattering complex formed. The nanoparticle probe
XX complexes comprise two or more probes bound to a specific target analyte.
XX The present sequence is a methicillin resistant Staphylococcus aureus
XX (MecA) gene specific probe. This sequence is used in the preparation
XX of nanoparticle-oligonucleotide conjugate probes. Note: This sequence is
XX incorrectly designated as SEQ ID NO: 25 in example 25 (page 25) of the
XX specification.
XX
XX Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
XX |
XX 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30
XX
XX RESULT 114
XX AEE86839/c
XX ID AEE86839 standard; DNA; 30 BP.
XX AC AEE86839;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo dT40-Cy3 #14.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= Cy3"
XX
XX PN DE102004025746-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025746.
XX
XX PR 26-MAY-2004; 2004DE-10025746.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX PI Cherkasov D, Hennig C, Baeuml E;
XX
XX DR WPI; 2006-040183/05.
XX
XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
XX Disclosure; Page 97; 144pp; German.
XX
XX This invention relates to a novel method for parallel sequence analysis
XX of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX The SP is useful for multiple parallel sequencing of nucleic acids and
XX shows reduced non-specific binding of labeled or unlabeled nucleotides
XX and nucleic acids, so the background remains low even after prolonged and
XX repeated contact of the solid phase with high concentrations of labeled
XX
```

```
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

  Query Match      1.1%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 115
AEE86831/c
ID AEE86831 standard; DNA; 30 BP.
XX
AC AEE86831;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo-dT30-Cy3 #6.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Cy3"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
PD WPI; 2006-040183/05.
XX
PF Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

  Query Match      1.1%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 117
AEE86849/c
ID AEE86849 standard; DNA; 30 BP.
XX
AC AEE86849;
XX
DT 23-FEB-2006 (first entry)
XX
```

```
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 116
AEE86833/c
ID AEE86833 standard; DNA; 30 BP.
XX
AC AEE86833;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dT40-Biotin #8.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5'-terminal Biotin-TEG"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
PD WPI; 2006-040183/05.
XX
PF Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

  Query Match      1.1%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 117
AEE86849/c
ID AEE86849 standard; DNA; 30 BP.
XX
AC AEE86849;
XX
DT 23-FEB-2006 (first entry)
XX
```

```

DE XX Novel solid phase-related oligonucleotide Oligo dT40-Biotin #7.
KW XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 5'-terminal Biotin-TEG"
XX PN DE102004025745-A1.
XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-040182/05.
XX XX
XX PT Surface of solid phase, useful for parallel, optical analysis of many
XX PT nucleic acids, has reduced non-specific binding of labeled components.
XX PS Disclosure; Page 62; 88pp; German.
XX CC This invention relates to a novel surface of a solid phase (SP), useful
XX CC in methods for parallel analysis of many individual nucleic acids (NA) by
XX CC optical methods. The novel SP is useful for multiple parallel sequencing
XX CC of nucleic acids and shows reduced non-specific binding of labeled or
XX CC unlabeled nucleotides and nucleic acids. The present sequence is that of
XX CC an oligonucleotide which was used in the development of the novel solid
XX CC phase of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 118
AEE86855/C
ID AEE86855 standard; DNA; 30 BP.
XX AC AEE86855;
XX DT 23-FEB-2006 (first entry)
XX DE Novel solid phase-related oligonucleotide Oligo dT40-Cy3 #13.
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX PN DE102004025745-A1.

```

```

XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-040182/05.
XX XX
XX PT Surface of solid phase, useful for parallel, optical analysis of many
XX PT nucleic acids, has reduced non-specific binding of labeled components.
XX PS Disclosure; Page 62; 88pp; German.
XX CC This invention relates to a novel surface of a solid phase (SP), useful
XX CC in methods for parallel analysis of many individual nucleic acids (NA) by
XX CC optical methods. The novel SP is useful for multiple parallel sequencing
XX CC of nucleic acids and shows reduced non-specific binding of labeled or
XX CC unlabeled nucleotides and nucleic acids. The present sequence is that of
XX CC an oligonucleotide which was used in the development of the novel solid
XX CC phase of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 119
AEE86847/C
ID AEE86847 standard; DNA; 30 BP.
XX AC AEE86847;
XX DT 23-FEB-2006 (first entry)
XX DE Novel solid phase-related oligonucleotide Oligo-dT30-Cy3 #5.
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX PN DE102004025745-A1.
XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX PN DE102004025745-A1.

```


DR WPI; 2006-040182/05.
XX Surface of solid phase, useful for parallel, optical analysis of many
PT nucleic acids, has reduced non-specific binding of labeled components.
XX
PS Disclosure; Page 62; 88pp; German.
XX
CC This invention relates to a novel surface of a solid phase (SP), useful
in methods for parallel analysis of many individual nucleic acids (NA) by
CC optical methods. The novel SP is useful for multiple parallel sequencing
of nucleic acids and shows reduced non-specific binding of labeled or
CC unlabeled nucleotides and nucleic acids. The present sequence is that of
CC an oligonucleotide which was used in the development of the novel solid
CC phase of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 120
AEF12156/c
ID AEF12156 standard; DNA; 30 BP.
AC AEF12156;
XX
DT 09-MAR-2006 (first entry)
XX
DE Oligonucleotide dT30-Cy3.
XX
KW DNA detection; DNA sequencing; primer; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "Optionally labeled with Cy3 or Biotin-TEG"
XX
PN DE102004025744-A1.
XX
XX 29-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025744.
XX
XX 26-MAY-2004; 2004DE-10025744.
XX
XX (CHER/) CHERKASOV D.
PA (HENW/) HENNIG C.
PA (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C;
PI
XX
XX WPI; 2006-081126/09.
DR
XX Surface of a solid support, useful for multiple parallel analysis of
PT nucleic acids by optical methods, having low non-specific binding of
PT labeled components.
PT
XX Disclosure; Page 62; 88pp; German.
PS
XX This invention describes a novel solid support surface for parallel
analysis of many individual nucleic acids by optical methods. The
CC invention also describes; a) a solid phase in which the surface shows
CC reduced non-specific binding of labeled components; b) methods for
preparing the novel solid support and c) methods of parallel analysis of

CC many nucleic acid by optical methods, using the solid support. The
CC surface of the solid support is made of silica, glass, silicon dioxide or
CC Si-OH; is flat and has nucleic acid chains fixed to it, optionally
CC through a linker. The solid phase is preferably part of a device that
CC allows fluid exchange and it is permeable to light in the wavelength
CC regions 200-400; 200-2000 or 400-800 nm. An external layer of solid
CC support is removed, then the nucleic acid is coupled to it, optionally
CC after attachment of a linker layer. Alternatively, after removing the
CC external layer, nucleic acids are synthesized on the surface by cyclic
CC coupling, optionally after attachment of a linker, and in either case,
CC additional substances (specifically phosphate, sulfate or carboxy-
CC containing monomers or polymers) can be coupled to the surface, after
CC attachment or synthesis of nucleic acids. Only part of the surface is
CC removed, particularly by a chemical reaction with hydrofluoric acid or
CC sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick.
CC Particularly after removal of the surface layer, the surface is not dried
CC and all subsequent steps are done in a liquid phase. The nucleic acids
CC analyzed represent a single population or many different populations and
CC contain 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long
CC and is e.g. a branched or linear polymer; (strept)avidin or a nucleic
CC acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or
CC dideoxyribo-nucleoside triphosphates, in which the label is cleavable.
CC Particularly analysis involves cyclic sequencing and a preferred method
CC comprises: binding nucleic acid to the solid support, with formation of a
CC extensible primer-matrix complex; performing cyclic reactions and
CC reconstructing the nucleic acid sequence. The sequences being analyzed
CC contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic
CC acid sequences that function as primers for the sequencing reaction;
CC alternatively the nucleic acid is fixed to the support and then
CC hybridized with a primer. The incorporated nucleotide includes a
CC reversible terminating group so that only one nucleotide can be
CC incorporated in each step. The surface is specifically used for multiple
CC parallel sequencing of nucleic acids. The surface shows reduced non-
CC specific binding of labeled and unlabeled nucleotides or nucleic acids,
CC so assay sensitivity is improved. This sequence represents an
CC oligonucleotide used to illustrate the method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 121
AEF94776/c
ID AEF94776 standard; DNA; 30 BP.
XX
AC AEF94776;
XX
DT 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dT40-biotin.
DE
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.
XX
XX Unidentified.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /mod_base= 5'-Biotin-TEG
FT
XX
XX DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
PF

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XX PR 26-MAY-2004; 2004DE-10025695.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX XX
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX PS Example 5; Page 66; 94pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-biot which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 122
AEF94774/C
ID AEF94774 standard; DNA; 30 BP.
XX AC AEF94774;
XX DT 20-APR-2006 (first entry)
XX DE Optical DNA analysis process-related oligonucleotide dT40-Cy3.
XX KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= b
FT /*mod_base= 5'-Cy3
XX PN DE102004025695-A1.
XX XX
XX PD 23-FEB-2006.
XX PF 26-MAY-2004; 2004DE-10025695.
XX PR 26-MAY-2004; 2004DE-10025695.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX XX
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX XX

```

```

PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX XX
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX PS Example 5; Page 66; 94pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT30-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 123
AEF94782/C
ID AEF94782 standard; DNA; 30 BP.
XX AC AEF94782;
XX DT 20-APR-2006 (first entry)
XX DE Optical DNA analysis process-related oligonucleotide dT40-Cy3.
XX KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= b
FT /*mod_base= 5'-Cy3
XX PN DE102004025695-A1.
XX XX
XX PD 23-FEB-2006.
XX PF 26-MAY-2004; 2004DE-10025695.
XX PR 26-MAY-2004; 2004DE-10025695.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX XX
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX XX

```

PS Example 2; Page 67; 94pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

CC co-ordinates logged and the signals removed. The marked nucleotides are

CC detected and their co-ordinates logged and the signals removed. The solid

CC phase is then washed and the sequence repeated as necessary. The Nucleic

CC acid chain sequence is then reconstructed using the signals. The process

CC is faster, more efficient and cheaper than prior art. Further claimed is

CC that the process is able to determine many sequences in parallel. The

CC present sequence is that of oligonucleotide dT40-Cy3 which was used in

CC the development of the novel process of the invention.

XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

SQ

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 124

AEF94758/c

ID AEF94758 standard; DNA; 30 BP.

AC AEF94758;

XX

DT 20-APR-2006 (first entry)

XX

DE Optical DNA analysis process-related oligonucleotide dT40-biotin.

XX

KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.

XX

OS Unidentified.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 1 /tag= b

FT /mod_base= 5'-Biotin-TEG

XX

PN DE102004025694-A1.

XX

PD 23-FEB-2006.

XX

PF 26-MAY-2004; 2004DE-10025694.

XX

PR 26-MAY-2004; 2004DE-10025694.

XX

PA (CHER/) CHERKASOV D.

PA (HENN/) HENNIG C.

PA (GENO-) GENOVORX GMBH.

XX

PI Cherkasov D, Hennig C;

XX

DR WPI; 2006-185818/20.

XX

PT Optical fluorescent ultra-high parallel process to analyse nucleic acid

PT chains in which a sample solid is bound with a primer-matrix complex.

XX

PS Example 5; Page 67; 95pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

CC co-ordinates logged and the signals removed. The marked nucleotides are

CC detected and their co-ordinates logged and the signals removed. The solid

CC phase is then washed and the sequence repeated as necessary. The Nucleic

CC acid chain sequence is then reconstructed using the signals. The process

CC is faster, more efficient and cheaper than prior art. The present

CC sequence is that of oligonucleotide dT40-biot which was used in the

CC development of the novel process of the invention.

XX

PS Example 2; Page 67; 94pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

CC co-ordinates logged and the signals removed. The marked nucleotides are

CC detected and their co-ordinates logged and the signals removed. The solid

CC phase is then washed and the sequence repeated as necessary. The Nucleic

CC acid chain sequence is then reconstructed using the signals. The process

CC is faster, more efficient and cheaper than prior art. Further claimed is

CC that the process is able to determine many sequences in parallel. The

CC present sequence is that of oligonucleotide dT40-Cy3 which was used in

CC the development of the novel process of the invention.

XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

SQ

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 124

AEF94758/c

ID AEF94758 standard; DNA; 30 BP.

AC AEF94758;

XX

DT 20-APR-2006 (first entry)

XX

DE Optical DNA analysis process-related oligonucleotide dT30-Cy3.

XX

KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT30-Cy3.

XX

OS Unidentified.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 1 /tag= b

FT /mod_base= 5'-Cy3

XX

PN DE102004025694-A1.

XX

PD 23-FEB-2006.

XX

PF 26-MAY-2004; 2004DE-10025694.

XX

PR 26-MAY-2004; 2004DE-10025694.

XX

PA (CHER/) CHERKASOV D.

PA (HENN/) HENNIG C.

PA (GENO-) GENOVORX GMBH.

XX

PI Cherkasov D, Hennig C;

XX

DR WPI; 2006-185818/20.

XX

PT Optical fluorescent ultra-high parallel process to analyse nucleic acid

PT chains in which a sample solid is bound with a primer-matrix complex.

XX

PS Example 5; Page 67; 95pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

```
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 126
AEF94766/C
ID AEF94766 standard; DNA; 30 BP.
XX
AC AEF94766;
XX
XX 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT40-Cy3.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
XX
OS Unidentified.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*tag= b
FT /mod_base= 5'-Cy3
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-185818/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 68; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dT40-Cy3 which was used in the
XX development of the novel process of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 127
AEF94719/C
ID AEF94719 standard; DNA; 30 BP.
XX
AC AEF94719;
XX
XX 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT30-Cy3.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT30-Cy3.
XX
OS Unidentified.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*tag= b
FT /mod_base= 5'-Cy3
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dT30-Cy3 which was used in
XX the development of the novel process of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 128
AEF94721/C
ID AEF94721 standard; DNA; 30 BP.
XX
```

Tue Nov 7 10:41:34 2006

```
AC AEF94721;
XX
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT40-biotin.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.
XX
XX Unidentified.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= b
FT /mod_base= 5'-Biotin-TEG
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-biot which was used in
XX CC the development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 129
AEF94721/c
ID AEF94727 standard; DNA; 30 BP.
XX
XX AEF94727;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dT40-Cy3.
DE
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
KW
```

```
XX Unidentified.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= b
FT /mod_base= 5'-Cy3
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.
XX
XX Example 2; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 130
AAx88521/c
ID AAX88521 standard; DNA; 33 BP.
XX
XX AAX88521;
XX
XX 13-SEP-1999 (first entry)
XX
XX Conus stercusmuscarum contryphan PCR primer DHOG 496.
XX
XX Contryphan; leu-tryphan; anticonvulsant; neuroprotective; venom;
XX KW cone snail; neurodegenerative disorder; epilepsy; neurotoxic injury;
XX KW hypoxia; anoxia; ischaemia; stroke; cerebrovascular accident;
XX KW brain trauma; spinal chord trauma; myocardial infarct; physical trauma;
XX KW drowning; suffocation; perinatal asphyxia; hypoglycaemia; migraine;
XX KW senile dementia; Alzheimer's disease; amyotrophic lateral sclerosis;
XX KW Parkinson's disease; Huntington's disease; Down's syndrome; PCR primer;
XX KW Korsakoff's disease; schizophrenia; neuronal damage; seizure; ss.
```

```

XX OS Synthetic.
XX OS Conus stercusmuscarum.
XX PN WO9933865-A1.
XX PD 08-JUL-1999.
XX PF 16-DEC-1998; 98WO-US026789.
XX PR 24-DEC-1997; 97US-0068737P.
XX PR 16-APR-1998; 98US-00061026.
XX PA (UTAH ) UNIV UTAH RES FOUND.
XX PI Jacobsen R, Jimenez E, Cruz LJ, Olivera BM, Gray WR, Grilley M;
XX PI Watkins M, Hillyard DR;
XX DR WPI; 1999-419087/35.
XX FT New pure contryphan peptides.
XX PS Example 3; Page 20; 48pp; English.
XX CC The present sequence represents a PCR primer for a contryphan
XX CC peptide sequence. Contryphan peptides are found in the venom of cone
XX CC snails. The contryphan peptides are useful as anticonvulsant agents, as
XX CC neuroprotective agents, for managing pain, and for treating
XX CC neurodegenerative disorders, especially those resulting from an
XX CC overstimulation of excitatory amino acid receptors. The contryphan are
XX CC useful for the treatment and alleviation of epilepsy and as a general
XX CC anticonvulsant agent. The contryphan are also useful to reduce
XX CC neurotoxic injury associated with conditions of hypoxia, anoxia, or
XX CC ischaemia which typically follows stroke, cerebrovascular accident, brain
XX CC or spinal chord trauma, myocardial infarct, physical trauma, drownings,
XX CC suffocation, perinatal asphyxia, or hypoglycaemic events. The contryphan
XX CC are further useful for the treatment of Alzheimer's disease, senile
XX CC dementia, amyotrophic lateral sclerosis, Parkinson's disease,
XX CC Huntington's disease, Down's syndrome, Korsakoff's disease,
XX CC schizophrenia, AIDS dementia, multi-infarct dementia, and neuronal damage
XX CC associated with uncontrolled seizures. The contryphan are further useful
XX CC in controlling pain and are effective in the treatment of migraine. They
XX CC can be used prophylactically or to relieve the symptoms associated with a
XX CC migraine episode
XX SQ Sequence 33 BP; 0 A; 1 C; 2 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4

RESULT 131
ADL33740/c
ID ADL33740 standard; DNA; 35 BP.
XX AC ADL33740;
XX DT 03-JUN-2004 (first entry)
XX DE LNA capture probe #3.
XX KW Detection; isolation; locked nucleic acid; LNA; probe; ss.
XX OS Synthetic.
XX FT Key Location/Qualifiers
FT modified_base 1..15
FT /*tag= b

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```

FT FT /mod_base= OTHER
FT FT /note= "10-mer deoxy-thymine and 5-mer non-base (t10-
FT FT NB5)"
FT FT 1
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "5' AQ2, where AQ is anthraquinone"
FT FT 16..35
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "Optionally LNA nucleotides"
XX XX WO2004020575-A2.
XX PD 11-MAR-2004.
XX PF 20-JUN-2003; 2003WO-IB006354.
XX PR 24-JUN-2002; 2002US-0390928P.
XX PA (EXIQ-) EXIQON AS.
XX PI Kauppinen S, Jacobsen N;
XX DR WPI; 2004-315512/29.
XX CC Detecting and/or isolating nucleic acid molecule having homopolymeric
XX CC sequence or repetitive element or conserved nucleotide sequence involves
XX CC treating sample containing nucleic acid compounds with locked nucleic
XX CC acid oligonucleotide.
XX PS Claim 23; Page 67; 104pp; English.
XX CC The present invention relates to a method (M1) for detecting and/or
XX CC isolating a nucleic acid having a homopolymeric sequence or repetitive
XX CC element or conserved nucleotide sequence. (M1) comprises treating a
XX CC sample containing nucleic acid compounds with an locked nucleic acid
XX CC (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
XX CC acid having the homopolymeric sequence or repetitive element or conserved
XX CC nucleotide sequence. (M1) is useful for detecting and isolating nucleic
XX CC acids released from a lysed complex biological mixture comprising nucleic
XX CC acids. The present sequence is a LNA capture probe, used to illustrate
XX CC the invention.
XX SQ Sequence 35 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 5 Other;

Query Match 1.1%; Score 30; DB 1; Length 35;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 30; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
DB 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 132
AAQ05003/c
ID AAQ05003 standard; DNA; 29 BP.
XX AC AAQ05003;
XX DT 25-MAR-2003 (revised)
XX DT 31-OCT-1990 (first entry)
XX DE Sequence binding to and inhibiting the GSTpi gene.
XX KW C-myc; cancer; HIV-1; AIDS; collagenase; Alzheimers disease; BGF;
XX KW epidermal growth factor; GSTpi; HMGCoA; thalassemia;
XX KW Herpes simplex virus; nerve growth factor receptor; globin; ss.
XX OS Synthetic.
XX PN EP375408-A.

```



```

XX PR 03-APR-2003; 2003US-00407818.
XX PA (RABB/) RABBANI E.
XX PA (STAV/) STAVRIANPOULOS J G.
XX PA (DONE/) DONEGAN J J.
XX PI Rabbani E, Stavrianopoulos JG, Donegan JJ;
XX DR WPI; 2004-727850/71.
XX XX
XX PT Composition of multi signal labeling reagents, useful for detecting or
XX PT quantifying analyte in specimen, has oligomer/polymer having labeled
XX PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX PS Example 6; SEQ ID NO 2; 20pp; English.
XX XX
XX CC The invention describes a composition (I) of matter comprising an
XX CC oligomer or polymer having two or more labeled groups, where the label or
XX CC labels are chemically linked to the oligomer or polymer, one or more
XX CC reactive groups, and one or more charged groups where the charged groups
XX CC are covalently linked to the oligomer or polymer or comprise part of the
XX CC backbone of the oligomer or polymer, or any of their combination. Also
XX CC described are: a composition (II) comprising a target molecule that has
XX CC been labeled using (I); and a composition (III) prepared by a target
XX CC labeling process comprising (i) providing a target for labeling, and a
XX CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
XX CC target and the labeling reagent to form the composition having the
XX CC formula (F3) or (F4). (I) is useful for labeling a target molecule;
XX CC detecting or quantifying an analyte in a specimen; and detecting or
XX CC quantifying an analyte in a specimen. (II) or (III) is useful for
XX CC detecting or quantifying an analyte, which involves providing (II) or
XX CC (III), where the target is an analyte specific moiety, contacting the
XX CC (II) or (III) with a specimen suspected of containing the analyte, and
XX CC measuring the amount of (II) or (III) bound to analytes in the specimen
XX CC to detect or quantify the analyte. (I) detects or quantifies analyte with
XX CC high sensitivity. In (I), the multiple labeled groups increases the
XX CC amount of signal that is added to the analyte specific moiety, the
XX CC presence of reactive groups enables attachment of the multiple labeled
XX CC groups to a desirable target and the presence of charged group increases
XX CC solubility. This sequence represents a multisignal labeling reagent
XX CC associate oligonucleotide.
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 0 G; 24 T; 5 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 136
ADU07155/C
ID ADU07155 standard; DNA; 29 BP.
XX AC ADU07155;
XX DT 27-JAN-2005 (first entry)
XX DE 3'-amino oligonucleotide #4 synthesised on a solid support.
XX XX
XX KW 3'-amino oligonucleotide; solid support; benzene derivative;
XX KW solid phase oligonucleotide synthesis; SPOS; controlled pore glass; CPG;
XX KW bi-fluorescent probe; ss.
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT modified_base 29 /*tag= a

XX PR 03-APR-2003; 2003US-00407818.
XX PA (RABB/) RABBANI E.
XX PA (STAV/) STAVRIANPOULOS J G.
XX PA (DONE/) DONEGAN J J.
XX PI Rabbani E, Stavrianopoulos JG, Donegan JJ;
XX DR WPI; 2004-727850/71.
XX XX
XX PT Composition of multi signal labeling reagents, useful for detecting or
XX PT quantifying analyte in specimen, has oligomer/polymer having labeled
XX PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX PS Example 6; SEQ ID NO 2; 20pp; English.
XX XX
XX CC The invention describes a composition (I) of matter comprising an
XX CC oligomer or polymer having two or more labeled groups, where the label or
XX CC labels are chemically linked to the oligomer or polymer, one or more
XX CC reactive groups, and one or more charged groups where the charged groups
XX CC are covalently linked to the oligomer or polymer or comprise part of the
XX CC backbone of the oligomer or polymer, or any of their combination. Also
XX CC described are: a composition (II) comprising a target molecule that has
XX CC been labeled using (I); and a composition (III) prepared by a target
XX CC labeling process comprising (i) providing a target for labeling, and a
XX CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
XX CC target and the labeling reagent to form the composition having the
XX CC formula (F3) or (F4). (I) is useful for labeling a target molecule;
XX CC detecting or quantifying an analyte in a specimen; and detecting or
XX CC quantifying an analyte in a specimen. (II) or (III) is useful for
XX CC detecting or quantifying an analyte, which involves providing (II) or
XX CC (III), where the target is an analyte specific moiety, contacting the
XX CC (II) or (III) with a specimen suspected of containing the analyte, and
XX CC measuring the amount of (II) or (III) bound to analytes in the specimen
XX CC to detect or quantify the analyte. (I) detects or quantifies analyte with
XX CC high sensitivity. In (I), the multiple labeled groups increases the
XX CC amount of signal that is added to the analyte specific moiety, the
XX CC presence of reactive groups enables attachment of the multiple labeled
XX CC groups to a desirable target and the presence of charged group increases
XX CC solubility. This sequence represents a multisignal labeling reagent
XX CC associate oligonucleotide.
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 0 G; 24 T; 5 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 136
ADH70631/C
ID ADH70631 standard; DNA; 33 BP.
XX AC ADH70631;
XX DT 25-MAR-2004 (first entry)
XX DE Human Vbeta gene repeat sequence #421.
XX XX
XX KW human; T-cell associated disease; Vbeta; autoimmune disease;
XX KW degenerative nervous system disease; graft versus host disease;
XX KW hypersensitivity disease; infectious disease; neoplastic disease;
XX KW Addison's disease; atrophic gastritis;
XX KW degenerative nervous system disease; multiple sclerosis;
XX KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
XX KW allergy; type II hypersensitivity; Goodpasture's syndrome;
XX KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
XX KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
XX KW filaria; bacterial infection; Mycobacterium; lymphoma; cancer; brain cancer;
XX KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
XX KW breast cancer; ds.

```

/mod_base= OTHER
/note= "Modified by NH2"

US2004220397-A1.

04-NOV-2004.

21-APR-2004; 2004US-00830484.

21-APR-2003; 2003US-0464269P.

(PROL-) PROLIGO LLC.

Leuck M, Wolter A;

WPI; 2004-794500/78.

Preparation of 3'-amino oligonucleotide derivatives, useful to synthesis bi-fluorescent probes, comprises providing solid support compounds, PT synthesis an oligonucleotide chain is assembled on the solid support, cleavage and deprotection.

Example 8; Page 16; 25pp; English.

The invention relates to the preparation of 3'-amino oligonucleotide derivatives. The method comprises providing solid support benzene derivatives, synthesising an oligonucleotide pursuant to standard techniques for solid phase oligonucleotide synthesis (SPOS) where the oligonucleotide chain is assembled on the solid support, cleaving the oligonucleotide from the solid support and deprotecting the oligonucleotide completely except for the terminal protective group. The solid phase is a derivatised controlled pore glass (CPG). The 3'-amino oligonucleotides are useful in the synthesis of bi-fluorescent probes. This process suppresses the undesired formation of unmodified 3'-OH oligonucleotides through cyclic phosphate intermediates and reduces the probability of errors resulting from the use of different reagents for different sets of oligonucleotides. This sequence represents an oligonucleotide synthesised in the examples of the present invention.

Sequence 29 BP; 0 A; 0 C; 0 G; 29 T; 0 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;

Best Local Similarity 100.0%; Pred. No. 2.2e+02;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737

Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 136

ADH70631/C

ID ADH70631 standard; DNA; 33 BP.

XX AC ADH70631;

XX DT 25-MAR-2004 (first entry)

XX DE Human Vbeta gene repeat sequence #421.

XX KW human; T-cell associated disease; Vbeta; autoimmune disease;

XX KW degenerative nervous system disease; graft versus host disease;

XX KW hypersensitivity disease; infectious disease; neoplastic disease;

XX KW Addison's disease; atrophic gastritis;

XX KW degenerative nervous system disease; multiple sclerosis;

XX KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;

XX KW allergy; type II hypersensitivity; Goodpasture's syndrome;

XX KW type IV hypersensitivity; leprosy; infectious disease; viral infection;

XX KW HIV; fungal infection; Candida; parasitic infection; schistosoma;

XX KW filaria; bacterial infection; Mycobacterium; neoplastic disease;

XX KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;

XX KW breast cancer; ds.

```

OS Homo sapiens.
XX US2002150891-A1.
XX
XX
XX
XX
XX
XX 17-OCT-2002.
XX
XX 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
XX 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
XX (HOWE/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
XX autoimmune, degenerative nervous system and infectious disease, comprises
XX nucleic acid primers specifically priming and allowing amplification of a
XX Vbeta gene.
XX
XX Disclosure; SEQ ID NO 825; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
XX associated diseases which comprises a panel of nucleic acid primers
XX specifically priming and allowing amplification of each Vbeta gene,
XX VbetarRNA or cDNA. The kit is useful for diagnosing organ transplant
XX rejection and diagnosing and treating T-cell associated diseases
XX including autoimmune diseases, degenerative nervous system diseases,
XX graft versus host disease, hypersensitivity diseases, infectious diseases
XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
XX atrophic gastritis. Degenerative nervous system diseases include multiple
XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
XX I hypersensitivities such as contact with allergens that lead to
XX allergies, Type II hypersensitivities such as those present in
XX Goodpasture's syndrome and Type IV hypersensitivities such as those
XX manifested in leprosy. Infectious diseases include viral infections
XX caused by viruses such as HIV, fungal infections such as those caused by
XX the yeast genus Candida, parasitic infections such as those caused by
XX schistosomes, filaria and bacterial infections such as those caused by
XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
XX breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 33 BP; 0 A; 0 C; 3 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 28.8; DB 1; Length 33;
XX Best Local Similarity 93.8%; Pred. No. 2.4e+02;
XX Matches 30; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db |||||
32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAACA 1

RESULT 137
ABQ80395
ID ABQ80395 standard; DNA; 33 BP.
XX
XX ABQ80395;
XX
XX 06-NOV-2003 (first entry)
XX
XX Probe APC 1-MUT.
XX
XX Probe; target; nanoparticle; detection; DNA sequencing; pathogen;
XX infection; screening; colour change; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers

```

```

FT modified_base 1
FT FT /*tag= a
FT FT /note= "Gold-S'-A"
XX
XX PN WO2003048769-A1.
XX
XX 12-JUN-2003.
XX
XX 27-NOV-2002; 2002WO-US038069.
XX
XX 30-NOV-2001; 2001US-0334644P.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Storhoff JJ, Fritz BM, Herrmann M;
XX
XX WPI; 2003-617993/58.
XX
XX Detecting target polynucleotide in a sample, by amplifying target,
XX hybridizing it to oligonucleotides bound to nanoparticles in nanoparticle
XX detection system, and determining amount of signal generated due to
XX binding.
XX
XX Example 1; Page 35; 74pp; English.
XX
XX The sequences given in ABQ80394-99 represent probes and targets which
XX were used in the method of the invention for detecting a target
XX polynucleotide in a sample. The method comprises amplifying the target,
XX hybridizing the target to oligonucleotides bound to nanoparticles in a
XX nanoparticle detection system, determining the amount of signal generated
XX as a result of binding, optionally repeating the above steps, and
XX detecting the presence of the target oligonucleotide by analysing for the
XX amount of signal produced after at least one amplification cycle. The
XX method is useful for detecting target polynucleotide in a sample, and for
XX determining the quantity of target polynucleotide in a sample. The method
XX is useful in research and analytical laboratories in DNA sequencing, in
XX the field to detect the presence of specific pathogens, in the doctor's
XX office for quick identification of an infection to assist in prescribing
XX a drug for treatment, and in homes and health centres for inexpensive
XX first-line screening. The method is based on observing colour change with
XX the naked eye, hence the method is cheap, fast, simple, robust, do not
XX require specialized or expensive equipment, and little or no
XX instrumentation is required
XX
XX Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db |||||
1 AAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32

RESULT 138
ADX44838
ID ADX44838 standard; DNA; 33 BP.
XX
XX ADX44838;
XX
XX 21-APR-2005 (first entry)
XX
XX Gold nanoparticle conjugated APC gene probe SEQ ID NO 2.
XX analyte detection; diagnosis; APC; probe; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Key misc_feature 1
XX FT /*tag= a
FT

```

```

FT      /note= "5' conjugated to a gold nanoparticle via a
XX      connecting unit"
XX      WO2005008222-A2.
XX      27-JAN-2005.
XX      27-MAY-2004; 2004WO-US016656.
XX      30-MAY-2003; 2003US-0474569P.
XX      29-AUG-2003; 2003US-0499034P.
XX      04-NOV-2003; 2003US-0517450P.
XX      (NANO-) NANOSPHERE INC.
XX      Storhoff JJ, Lucas A, Mueller UR, Bao YP;
XX      WPI; 2005-152097/16.
XX      Detection of target analyte, e.g. nucleic acids or proteins, useful for
XX      diagnosis of genetic and infectious diseases, comprises forming light
XX      scattering complex, and illuminating complex to produce scattered light
XX      from complex.
XX      Example 1; SEQ ID NO 2; 70pp; English.
XX      The invention relates to the detection of a target analyte having at
XX      least two portions, which comprises forming a light scattering complex by
XX      contacting a sample containing specific binding complement with
XX      nanoparticle and with polysaccharide under conditions to allow binding of
XX      the specific complement to two or more portions of the target analyte and
XX      illuminating the light scattering complex under conditions to produce
XX      scattered light from the complex. The invention is useful for detecting
XX      target analyte, e.g. nucleic acids or proteins, useful for the diagnosis
XX      of genetic and infectious diseases. The present sequence represents an
XX      APC probe conjugated to a gold nanoparticle.
XX      Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX      Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX      Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX      Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX      QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
XX      1 AAAAAAAAAAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32
XX      Db
XX      RESULT 139
XX      AED67931
XX      ID AED67931 standard; DNA; 33 BP.
XX      AC AED67931;
XX      12-JAN-2006 (first entry)
XX      Human mutant APC 1 gene specific probe, APC 1-MUT.
XX      Analyte detection; DNA detection; protein detection; APC gene; probe; ss;
XX      mutant.
XX      Homo sapiens.
XX      OS Synthetic.
XX      Key Location/Qualifiers
XX      modified_base 1..33
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER= Linked to gold-s' where s' indicates a
XX      connecting unit prepared via an epiandrosterone disulfide
XX      group"
XX      US2005250094-A1.

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XX      10-NOV-2005.
XX      22-NOV-2004; 2004US-00995051.
XX      30-MAY-2003; 2003US-0474569P.
XX      29-AUG-2003; 2003US-0499034P.
XX      04-NOV-2003; 2003US-0517450P.
XX      03-MAY-2004; 2004US-0567874P.
XX      27-MAY-2004; 2004US-00854848.
XX      (NANO-) NANOSPHERE INC.
XX      Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX      WPI; 2005-784662/80.
XX      Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX      sample, comprises contacting sample with one or more types of
XX      nanoparticle having target binding complements, and detecting any light
XX      scattering complex formed.
XX      Example 1; SEQ ID NO 2; 70pp; English.
XX      The present invention provides a method for detecting the presence or
XX      absence of a single target molecule or target analyte (e.g. nucleic acid,
XX      protein, lipid, bacterium). The method involves contacting sample with
XX      one or more types of nanoparticle having target binding complements and
XX      detecting any light scattering complex formed. The nanoparticle probe
XX      complexes comprise two or more probes bound to a specific target analyte.
XX      The present sequence is a human mutant APC gene specific probe. This
XX      sequence is used in the preparation of nanoparticle-oligonucleotide
XX      conjugate probes.
XX      Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX      Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX      Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX      Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX      QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
XX      1 AAAAAAAAAAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32
XX      Db
XX      RESULT 140
XX      AAN70281/C
XX      ID AAN70281 standard; DNA; 27 BP.
XX      AC AAN70281;
XX      03-OCT-2002 (revised)
XX      26-MAY-1991 (first entry)
XX      Sequence of scissile link probe MRC071 (HL).
XX      Hybridisation; probe; ss.
XX      OS Synthetic.
XX      EP227976-A.
XX      08-JUL-1987.
XX      04-DEC-1986; 86EP-00116906.
XX      05-DEC-1985; 85US-00805279.
XX      (MEIO-) MEIOGENICS INC.
XX      Duck P, Bender R, Crosby W, Robertson JG;
XX      WPI; 1987-186567/27.

```

XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
XX Example; p29; 46pp; English.
XX
XX The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogeneous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 141
AAN70274/c
ID AAN70274 standard; DNA; 27 BP.
XX
AC
XX AAN70274;
XX
XX 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
XX Sequence of scissile link probe MRC046 (PL).
DE
XX Hybridisation, probe; ss.
XX
XX Synthetic.
OS
XX EP227976-A.
PN
XX 08-JUL-1987.
PD
XX 04-DEC-1986; 86EP-00116906.
PF
XX 05-DEC-1985; 85US-00805279.
PR
XX (MEIO-) MEIOGENICS INC.
PA
XX Duck P, Bender R, Crosby W, Robertson JG;
PI
XX WPI; 1987-186567/27.
DR
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
XX Example; p29; 46pp; English.
XX
XX The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogeneous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX

SQ Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 142
AAN92240/c
ID AAN92240 standard; DNA; 27 BP.
XX
AC AAN92240;
XX
XX 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
XX SS probe MRC046.
DE
XX Probe MRC046; solid support; ribonuclease.
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH
FT misc_feature 1..10
FT /*tag= a
FT /note= "deoxyribonucleotides."
FT
FT misc_feature 11..16
FT /*tag= b
FT /note= "ribonucleotides."
FT
FT misc_feature 17..27
FT /*tag= c
FT /note= "deoxyribonucleotides."
FT
XX WO8910415-A.
PN
XX
XX 02-NOV-1989.
PD
XX
XX 29-APR-1988; 88US-00187814.
PF
XX
XX 29-APR-1988; 88US-00187814.
PR
XX
XX (MEIO-) MEIOGENICS INC.
PA
XX Duck P, Bender R;
PI
XX WPI; 1989-339977/46.
DR
XX
XX Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
PT
XX Disclosure; Page 24; 34pp; English.
PS
XX
XX Probe MRC046 is bound by a permanent linkage to a solid support at its 3'
CC end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;

```
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 143
AAN92247/C
ID AAN92247 standard; DNA; 27 BP.
XX
AC AAN92247;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRCO71.
XX
KW Probe MRCO71; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /note= "deoxyribonucleotides."
FT /tag= a
FT misc_feature 16..17
FT /note= "ribonucleotides."
FT /tag= b
FT misc_feature 18..27
FT /note= "deoxyribonucleotides."
FT /tag= c
XX
PN WO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
WPI; 1989-339977/46.
XX
PS Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRCO71 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 144
AAQ40854
ID AAQ40854 standard; DNA; 27 BP.
XX
AC AAQ40854;
XX
DT 23-SEP-1993 (first entry)
XX
DE DNA sequence used in DNA replication method.
XX
KW ss.
XX
OS Synthetic.
XX
PN JP05103673-A.
XX
PD 27-APR-1993.
XX
PF 26-AUG-1991; 91JP-00240525.
XX
PR 26-AUG-1991; 91JP-00240525.
XX
PA (UYAR-) UNIV ARIZONA.
XX
WPI; 1993-171830/21.
XX
PT Replication of DNA - useful in genetic engineering and medical
PT applications.
XX
PS Disclosure; Page 20; 20pp; Japanese.
XX
CC The sequence is given in the disclosure to illustrate the invention
XX
SQ Sequence 27 BP; 27 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 145
AAF99706/C
ID AAF99706 standard; DNA; 27 BP.
XX
AC AAF99706;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #822.
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
PD 05-APR-2001.
XX
PF 25-SEP-2000; 2000WO-US026383.
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
```

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XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 56; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 146
ABS78427/c
ID ABS78427 standard; DNA; 27 BP.
XX
XX ABS78427;
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #911.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophiliac joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX

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```

XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 35; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 147
ABL39406/c
ID ABL39406 standard; DNA; 27 BP.
XX
XX ABL39406;
XX
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 842.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..27
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 310; 312pp; English.
XX

```

XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX

SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
 Query Match 1.0%; Score 27; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
 DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 148
 ABK66592/c
 ID ABK66592 standard; DNA; 27 BP.
 XX
 AC ABK66592;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human gene specific PCR primer #680.
 XX
 KW Primer; ss; DNA microarray; differential expression analysis; human.
 XX
 OS Homo sapiens.
 XX
 PN US6352829-B1.
 XX
 PD 05-MAR-2002.
 XX
 PF 05-JAN-1999; 99US-00225928.
 XX
 PR 21-MAY-1997; 97US-00859998.
 XX
 PA (CLON-) CLONTECH LAB INC.
 XX
 PI Chenchik A, Johhadze G, Bibilashvili R;
 XX
 DR WPI; 2002-314699/35.
 XX

PT Producing sub-population of labeled nucleic acids, useful for analyzing
 PT differences in RNA profiles between several different physiological
 PT sources, using set of distinct gene specific primers.
 XX

PS Example 3; SEQ ID NO 680; 11pp; English.
 XX

CC The invention relates to producing a sub-population of labeled nucleic
 CC acids (NAs) comprising contacting a NA sample from a physiological
 CC source, with a pool of 50 distinct gene specific primers under suitable
 CC conditions to enzymatically generate sub-population of NAs, where each
 CC gene specific primer has a sequence complementary to a distinct mRNA, and
 CC each labeled NA is generated using a single gene specific primer. The
 CC method is useful for producing a sub-population of labeled NAs which is
 CC useful for analysing the differences in the RNA profiles between several
 CC different physiological sources, where the method comprises producing
 CC subpopulation of labeled NAs for the different physiological sources,
 CC comprising the populations for each physiological source to identify
 CC differences in the population, where the comparison is preferably

CC performed by hybridising the labeled NAs for each of the distinct
 CC physiological sources to an array of probe NAs stably associated with the
 CC surface of a substrate to produce a hybridisation pattern for each of the
 CC sources, and comparing the patterns for each of the sources, where
 CC differential gene expression assays are utilised in differential
 CC expression analysis of diseased a normal tissue e.g. neoplastic a normal
 CC tissue, or different tissue or subtype tissues. The present sequence is a
 CC human gene specific PCR primer used in the method of the invention. Note:
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from USPTO
 CC at <http://wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1>
 XX

SQ Sequence 27 BP; 4 A; 8 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2578 GAAGAGTCTACCGACATTAAGTCGAGG 2504
 DB 27 GAAGAGTCTACCGACATTAAGTCGAGG 1

RESULT 149
 ACH03245/c
 ID ACH03245 standard; DNA; 27 BP.
 XX
 AC ACH03245;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #880.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI; 2003-521815/49.
 XX

PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX

PS Disclosure; Page 32; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;


```

Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 150
ADB37208/c
ID ADB37208 standard; DNA; 27 BP.
XX
AC ADB37208;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #822.
XX
KW db; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
PN US2003087848-A1.
XX
PD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00776479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
PI WPI; 2003-657977/62.
DR
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 17; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 151
ADS19108/c
ID ADS19108 standard; DNA; 27 BP.
XX
AC ADS19108;
XX
DT 30-DEC-2004 (first entry)
XX
DE Multisignal labeling reagent associated oligonucleotide seqid 3.
XX
XX Labeling molecule; solubility; multisignal labeling reagent; ss;

```

```

KW DNA-RNA hybrid.
XX Synthetic.
OS
FH Key
FT misc_RNA
FT
FT Location/Qualifiers
FT 1
FT /*tag= a
FT /note= "Allylamine modified uridine"
FT
FT 7
FT /*tag= b
FT /note= "Allylamine modified uridine"
FT
FT 13
FT /*tag= c
FT /note= "Allylamine modified uridine"
FT
FT 19
FT /*tag= d
FT /note= "Allylamine modified uridine"
FT
FT 25
FT /*tag= e
FT /note= "Allylamine modified uridine"
FT
XX US2004198971-A1.
XX
XX 07-OCT-2004.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX (RABB/) RABBANI E.
XX (STAV/) STAVRIANOPOULOS J G.
XX (DONE/) DONEGAN J J.
XX
XX Rabbani E, Stavrianopoulos JG, Donegan JJ;
XX WPI; 2004-727850/71.
XX
XX Composition of multi signal labeling reagents, useful for detecting or
XX quantifying analyte in specimen, has oligomer/polymer having labeled
XX moieties, reactive groups and charged groups linked to oligomer/polymer.
XX
XX Example 7; SEQ ID NO 3; 20pp; English.
XX
XX The invention describes a composition (I) of matter comprising an
XX oligomer or polymer having two or more labeled groups, where the label or
XX labels are chemically linked to the oligomer or polymer, one or more
XX reactive groups, and one or more charged groups where the charged groups
XX are covalently linked to the oligomer or polymer or comprise part of the
XX backbone of the oligomer or polymer, or any of their combination. Also
XX described are: a composition (II) comprising a target molecule that has
XX been labeled using (I); and a composition (III) prepared by a target
XX labeling process comprising (i) providing a target for labeling, and a
XX labeling reagent having the formula (F1) or (F2), (ii) reacting the
XX target and the labeling reagent to form the composition having the
XX formula (F3) or (F4). (I) is useful for labeling a target molecule;
XX detecting or quantifying an analyte in a specimen; and detecting or
XX quantifying an analyte in a specimen. (II) or (III) is useful for
XX detecting or quantifying an analyte, which involves providing (II) or
XX (III), where the target is an analyte specific moiety, contacting the
XX (II) or (III) with a specimen suspected of containing the analyte, and
XX measuring the amount of (II) or (III) bound to analytes in the specimen
XX to detect or quantify the analyte. (I) detects or quantifies analyte with
XX high sensitivity. In (I), the multiple labeled groups increases the
XX amount of signal that is added to the analyte specific moiety, the
XX presence of reactive groups enables attachment of the multiple labeled
XX groups to a desirable target and the presence of charged group increases
XX solubility. This sequence represents a multisignal labeling reagent
XX associate oligonucleotide.
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 22 T; 5 U; 0 Other;
SQ

```

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Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;

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Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 152
ADU90227/C
ID ADU90227 standard; DNA; 27 BP.
XX
AC
XX ADU90227;
XX
DT 10-FEB-2005 (first entry)
XX
DE Allergic response suppressor oligonucleotide #911.
XX
KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
KW bacterial infection; viral infection.
XX
OS Synthetic.
XX
PN US2004235774-A1.
XX
PD 25-NOV-2004.
XX
PF 23-APR-2004; 2004US-00831778.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PR 02-FEB-2001; 2001US-00776479.
XX
PA (BRATZ) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
XX
DR WPI; 2004-833006/82.
XX
PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
PT dermatitis, in a subject, comprises administering a first and second dose
PT of an immunostimulatory nucleic acid.
XX
PS Disclosure; SEQ ID NO 911; 235pp; English.
XX
CC The invention relates to a method of suppressing a symptom of an allergic
CC response in a subject by administering a first and second dose of an
CC immunostimulatory nucleic acid that comprises a nucleotide sequence
CC comprising 5'-cg-3', and where the second dose is administered from 1 day
CC to 8 weeks after the first dose. The methods and compositions of the
CC present invention are useful for the treatment or prevention of asthma
CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
CC an immunostimulatory nucleic acid alone or in combination with other
CC medicaments. They can also be used in preventing bacterial and viral
CC infections. This sequence represents an oligonucleotide used in the
CC method of the invention.
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 153
AED75671/C
ID AED75671 standard; DNA; 27 BP.
XX

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XX AED75671;
XX
XX 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 880.
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX Crohns disease; ulcerative colitis; eczema; skin allergy;
XX contact dermatitis; ss; phosphorothioate.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..27
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
XX to augment T-helper cells like immune activation and to treat non-
XX allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 880; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
XX (Th1)-like immune activation in a subject. The method comprises
XX administering an immunostimulatory nucleic acid (I) to induce Th1-like
XX immune activation; and administering a cyclooxygenase inhibitor (II) to
XX inhibit prostaglandin expression, is new. The present sequence is one
XX such immunostimulatory nucleic acid. (I) is useful for treating non-
XX allergic inflammatory diseases such as psoriasis, inflammatory bowel
XX diseases (Crohn's disease and ulcerative colitis), eczema, allergic
XX contact dermatitis or latex dermatitis.
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 154
AAV15487/C
ID AAV15487 standard; DNA; 29 BP.
XX
AC AAV15487;
XX
XX 20-JUL-1998 (first entry)
XX
XX PR-1 promoter primer P41+ for in vivo footprinting.
XX

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```

KW Promoter PR-1; salicylic acid, 2,6-dichloroisocotinic acid;
KW benzo(1,2,3)thiadiazole-7-carbothioic acid S-methyl ester;
KW transgenic plant; PCR; primer; ss.
XX
XX
OS Synthetic.
OS Arabidopsis thaliana.
XX
XX WO9803536-A1.
XX
XX PD 29-JAN-1998.
XX
XX PF 18-JUL-1997; 97WO-US012626.
XX
XX PR 23-JUL-1996; 96US-0027228P.
XX
XX (NOVS ) NOVARTIS CORP.
XX
XX PI Lebel EG, Ryals JA, Thorne L, Uknes SJ, Ward ER;
XX
XX WPI; 1998-120690/11.
XX
XX New chemically inducible promoter from Arabidopsis - used to regulate
XX gene expression in response to e.g. salicylic acid.
XX
XX Example 9; Page 32; 60pp; English.
XX
XX Primer P41+ corresponds to nucleotides -735 to -706 relative to the
XX transcription start site in the upstream region (see AAV15448) of the
XX Arabidopsis PR-1 gene (see AAV15448). It was used in non-coding strand
XX analysis of the PR-1 promoter region. In vivo footprinting analysis was
XX performed of the PR-1 promoter region. Inducible in vivo footprints are
XX located at positions -629 and -628 and at position -604 on the coding
XX strand and at position -641 on the non-coding strand. The use of PR-1
XX promoter fragments to regulate gene expression in plants in the presence
XX of chemical inducers is disclosed
XX
XX Sequence 29 BP; 0 A; 2 C; 0 G; 27 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 28 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2

RESULT 155
AA94315
ID AAA94315 standard; DNA; 29 BP.
XX
XX AC AAA94315;
XX
XX 11-JAN-2001 (first entry)
XX
XX RNA-protein fusion oligonucleotide 30-P.
XX
XX RNA-protein fusion; protein library; protein isolation; gene cloning; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 29 /*tag= a
XX /mod_base= OTHER
XX /note= "attached to puromycin, a peptide acceptor"
XX
XX WO200047775-A1.
XX
XX 17-AUG-2000.
XX
XX 01-FEB-2000; 2000WO-US002589.
XX

PR 09-FEB-1999; 99US-00247190.
XX
XX (GENO ) GEN HOSPITAL CORP.
XX
XX Szostak JW, Roberts RW, Liu R;
XX
XX WPI; 2000-533022/48.
XX
XX Producing protein or DNA libraries which are useful for improving
XX existing proteins, by in vitro translating protein coding sequences to
XX produce RNA-protein fusions and incubating these protein fusions under
XX high salt conditions.
XX
XX Disclosure; Page 43; 121pp; English.
XX
XX The present sequence is one of a number of oligonucleotides which were
XX used for the generation of RNA-protein fusions, including fusions having
XX a myc epitope tag. The RNA-protein fusions comprise a protein covalently
XX linked to the 3' end of its own mRNA. This is accomplished by synthesis
XX and in vitro or in situ translation of an mRNA molecule with a peptide
XX acceptor attached to its 3' end. The RNA-protein fusions are incubated is
XX under high salt conditions to produce a protein library. This method is
XX useful for improving or altering existing proteins, as well as for
XX isolating new proteins and nucleic acid or small molecule targets. It may
XX also be used to improve human or humanised single-chain antibodies for
XX the treatment of a number of diseases. The method is useful for the
XX isolation of proteins with specific binding properties, for screening
XX cDNA libraries and cloning new genes on the basis of protein-protein
XX interactions. Unlike prior art, the new method does not rely on
XX maintaining the integrity of an mRNA:ribosome:nascent chain ternary
XX complex, which is very fragile and is therefore of limited use. The
XX method does not rely on topological links between the protein and the
XX nucleic acid so that the information of the protein is retained and can
XX be recovered in readable, nucleic acid form
XX
XX Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 156
AAS00066
ID AAS00066 standard; DNA; 29 BP.
XX
XX AC AAS00066;
XX
XX 12-SEP-2001 (first entry)
XX
XX Synthetic branched encoding molecule sequence.
XX
XX Addressing element; microarray; protein display;
XX branched encoding molecule; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 9..10 /*tag= a
XX /mod_base= OTHER
XX /note= "AXA, where X is a branching monomer, linked to
XX nucleotide 16 of sequence in AAS00065 via a (Hexaethylene
XX oxide)n linkage"
XX
XX modified_base 30 /*tag= b
XX /mod_base= OTHER
XX /note= "Other= Covalently linked to puromycin"
XX

```

```

PN WO200116352-A1.
XX
PD 08-MAR-2001.
XX
PF 25-AUG-2000; 2000WO-US023414.
XX
PR 27-AUG-1999; 99US-0151261P.
XX
PR (PHYL-) PHYLOS INC.
XX
PA Kuimelis RG;
XX
PI WPI; 2001-183261/18.
XX
DR
XX
XX Encoding and sorting in vitro translated proteins, useful for the
PT identification of desired binding partners, comprises attaching a nucleic
PT acid linker to the protein and binding an encoding molecule to the
PT linker.
XX
PS Example 3; Fig 9B; 48pp; English.
XX
CC The sequence represents part of a branched encoding molecule used in
CC methods to hybridise a capture probe to the addressing element of a DNA
CC linker attached to an in vitro translated protein, in order to immobilise
CC the protein to a solid support. The new methods are useful for tagging or
CC encoding in vitro translated proteins with unique and minimal encoding
CC molecules and sorting these molecules onto solid supports. They are also
CC useful for the identification of a desired binding partner. The method
CC allows the use of pre-made sets of universal encoding molecules, such as
CC nucleic acid(s) (analogues). These can be used in conjunction with
CC corresponding universal microarrays or sets of microparticles to create
CC new protein display systems which are flexible, modular, scalable and
CC cost effective. The method allows the use of nucleic acid analogue which
CC are not susceptible to enzymatic incorporation or polymerisation and are
CC superior to conventional DNA/RNA. The proteins can also be labelled with
CC fluorescent groups which can be used to monitor the protein in real time.
CC The absence of RNA is advantageous as they can adopt secondary structures
CC which are difficult to predict and can interfere with hybridisation steps
CC and protein folding/function
XX
SQ Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 157
AAH20990
ID AAH20990 standard; DNA; 29 BP.
XX
AC AAH20990;
XX
XX 31-AUG-2001 (first entry)
XX
DE C-myc epitope puromycin linker primer #1.
XX
KW C-myc; epitope; detection; amplification; biomedical diagnosis;
KW environmental monitoring; primer; ss.
XX
OS Unidentified.
XX
XX WO20012494-A2.
XX
PD 14-JUN-2001.
XX
PF 20-OCT-2000; 2000WO-EP010336.
XX
PR 10-DEC-1999; 99DE-01059857.

```

```

XX
PA (AVET ) AVENTIS RES & TECHNOLOGIES GMBH & CO KG.
XX
PI Burgstaller P, Konz D;
XX
XX WPI; 2001-381706/40.
XX
PT System for detecting immobilized analyte, useful e.g. for biomedical
PT diagnosis, has as detection agent specific polypeptide coupled to nucleic
PT acid for signal amplification.
XX
PS Example; Page 6; 12pp; German.
XX
CC This invention describes a novel test system (A) which comprises at least
CC one immobilized analyte (I) on an insoluble carrier and a polypeptide
CC detection agent (II), specific for (I) and conjugated, via a linker, to
CC an amplifier (III). (A) is used for direct, in vitro detection of (I)
CC with amplification of the signal by polymerase chain reaction (PCR), or a
CC related technique, applied to (III). The method is useful in biomedical
CC diagnosis and environmental monitoring and can be used to detect a wide
CC range of (I), e.g. diagnostic or pharmaceutical agents, secondary
CC metabolites, herbicides or pesticides. (A) allow simultaneous, parallel
CC detection of many different analytes (high throughput capacity),
CC relatively simply (only a few incubation and washing steps are required)
CC and with high sensitivity and selectivity. This sequence represents
CC primer used in the amplification of the c-myc DNA fragment which encodes
CC an epitope used to illustrate the method of the invention
XX
SQ Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 158
AAK98637
ID AAK98637 standard; DNA; 29 BP.
XX
AC AAK98637;
XX
XX 19-APR-2002 (first entry)
XX
DE S cerevisiae alpha factor receptor STE2 vector linker.
XX
KW Biological material detection; electrophoresis; bioprobe isolation;
KW alpha factor receptor; STE2; linker; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 29
FT /*tag= a
FT /mod_base= OTHER
FT /note= "modified by puromycin"
XX
PN WO200204656-A2.
XX
PD 17-JAN-2002.
XX
XX 26-JUN-2001; 2001WO-EP007259.
XX
XX 07-JUL-2000; 2000DE-01033194.
XX
XX (XZIL-) XZILLION GMBH & CO KG.
XX
XX Wagner P, Polakowski T;
XX
XX WPI; 2002-154934/20.

```

XX Detecting and purifying biological material by (di)electrophoresis,
PT useful e.g. for separating tissues and viruses, comprises using a probe
PT that alters (di)electrophoretic properties.
XX
PS Example 1; Page 12; 20pp; German.
XX
CC The present invention relates to a method for the detection or
CC purification of biological material by electrophoresis, which comprises
CC (i) treating the biological material containing different species with a
CC bioprobe and (ii) establishing an electric field for detection or
CC purification of at least one complex formed between the biological
CC material being tested and a specifically bound bioprobe. The method is
CC used for detection and purification of tissue, cells, cell organelles,
CC viruses, proteins, nucleic acids, lipids and/or other organic compounds.
CC It can also be used for the isolation of specific bioprobes from a
CC library of bioprobes. The present sequence is a linker described in the
CC exemplification of the invention
XX
SQ Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 159
AAV48087
ID AAV48087 standard; DNA; 30 BP.
XX
AC AAV48087;
XX
DT 27-OCT-1998 (first entry)
XX
DE Oligonucleotide 30-P.
XX
KW In situ translation; RNA-protein fusion; binding reagent; antibody;
KW industrial catalyst; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 30 /*tag= a
FT /note= "Puromycin"
FT
FN WO9831700-A1.
XX
XX 23-JUL-1998.
XX
XX 14-JAN-1998; 98WO-US000807.
XX
XX 21-JAN-1997; 97US-0035963P.
XX 06-NOV-1997; 97US-0064491P.
XX
XX (GEHO) GEN HOSPITAL CORP.
XX
XX Szoatak JW, Roberts RW, Liu R;
XX
XX WPI; 1998-414032/35.
XX
PT Selection of specific protein by screening protein-RNA fusions generated
PT in vitro or in situ - useful for, e.g. identifying enzymes and antibodies
PT with altered properties, potentially useful as catalysts or for therapy
PT or diagnosis.
XX
XX Disclosure; Page 39; 94pp; English.
XX
XX The Oligonucleotides AAV48087, AAV48089-V48091 and AAV48096-V48098 and

CC variations were used to generate RNA-protein fusions. These were used in
CC the selection of a specific protein or RNA, by in vitro or in situ
CC translation of candidate RNA molecules to produce RNA-protein fusions,
CC then selecting specific RNA protein fusions. The method is used to select
CC proteins (or DNA encoding them) having altered properties, e.g. for
CC identification of new binding reagents, to identify improved human
CC antibodies or new enzymes. These proteins are potentially useful in
CC diagnosis and therapy, or as industrial catalysts. The methods allow many
CC rounds of selection and amplification to be performed, resulting in
CC enrichment of even very rare molecules and allowing isolation of proteins
CC that bind specifically to almost any compound or catalyse almost any
CC reaction
XX
SQ Sequence 30 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 1 Other;
Query Match 1.0%; Score 27; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 160
ADY75117
ID ADY75117 standard; DNA; 30 BP.
XX
AC ADY75117;
XX
DT 02-JUN-2005 (first entry)
XX
DE Nucleic acid construct production associated polynucleotide #9.
XX recombinant DNA; ds.
XX Unidentified.
XX WO2005024018-A1.
XX 17-MAR-2005.
XX 08-SEP-2004; 2004WO-JP013399.
XX 08-SEP-2003; 2003JP-00315385.
XX (ZOE-) ZOEGENE CORP.
XX Sasaki T, Shiratori M;
XX WPI; 2005-223378/23.
XX
XX Producing a nucleic acid construct, for producing a protein nucleic acid
XX conjugate, comprises partial annealing a two single stranded nucleic
XX acids, and coupling the nucleic acids to a third single stranded nucleic
XX acid.
XX
XX Example 1; Page 30; 85pp; Japanese.
XX
XX The invention describes a method of producing (M1) a nucleic acid
XX construct having a first, second and third single stranded nucleic acid.
XX The method comprises: coupling the first and third single stranded
XX nucleic acid by a chemical bond present on the same terminals of each
XX nucleic acid through a linker; annealing the first and second single
XX stranded nucleic acid; and coupling the second and third single stranded
XX nucleic acid by ligase. Also described are: a nucleic acid construct (I)
XX obtainable by (M1); a protein nucleic acid conjugate with (I); a DNA-RNA-
XX coupling the protein encoded by a coding sequence with (I); a DNA-RNA-
XX protein conjugate (III) obtainable by annealing DNA to an mRNA strand of
XX (II); and a double stranded DNA-protein conjugate obtainable by carrying
XX out a polymerase reaction with DNA and a degrading RNA of (III). (M1) Is
XX useful for producing a nucleic acid construct having a first, second and
XX third single stranded nucleic acid. (I) Is useful for producing (II)


```

Db      1 AAAAAAAAAAAAAACGAAAAAAAAAAAAAAAAAAAAA 30

RESULT 164
AAZ43904/c
ID    AZA43904 standard; DNA; 27 BP.
XX
AC    AAZ43904;
XX
DT    10-MAR-2000 (first entry)
XX
DE    M. tuberculosis rpo-beta primer 17.
XX
KW    RNA polymerase; rpo-beta; detection; diagnostic; trap probe; primer; ss.
XX
OS    Mycobacterium tuberculosis.
XX
PN    EP962536-A1.
XX
PD    08-DEC-1999.
XX
PF    29-MAY-1999; 99EP-00110458.
XX
PR    04-JUN-1998; 98DE-01024900.
XX
PA    (HOFF ) ROCHE DIAGNOSTICS GMBH.
XX
PI    Weindel K, Brand J;
XX
DR    WPI; 2000-055287/05.
XX
PT    Selective detection of nucleic acids by amplification with labeled
PT    primers and detection with a trap probe.
XX
PS    Example 1c; Page 19; 27pp; German.
XX
CC    This invention describes a novel method for the selective detection of
CC    nucleic acids which comprises amplification of the nucleic acid with the
CC    help of labeled primers and detection with a trap probe. The methods and
CC    reagents are used for the detection of a marker primer and at least 2
CC    immobilized (or immobilizable) trap probes with the corresponding nucleic
CC    acid sequence of interest for mutation analysis. The method can be used
CC    to detect a specific sequence in a sample of one or more nucleic acids by
CC    using several sets of primers and trap probes (i.e. in an array). The
CC    methods are useful in molecular biology and diagnostic applications,
CC    especially for simultaneous detection of multi-pathogens, typing of
CC    organisms, analyzing genetic diversity and sequencing of genes or
CC    genomes. This sequence represents a primer used in the method of the
CC    invention
XX
SQ    Sequence 27 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 1 Other;

Query Match          1.0%; Score 26.6; DB 1; Length 27;
Best Local Similarity 96.3%; Pred. No.3e+02; 0; Indels 0; Gaps 0;
Matches 26; Conservative 1; Mismatches

OY    2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB    27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 165
ABX12469/c
ID    ABX12469 standard; DNA; 27 BP.
XX
AC    ABX12469;
XX
DT    10-MAY-2003 (first entry)
XX
DE    Coxsackie B virus 4 (CBV-4) strain VD2921, PCR primer dt26v.
XX
KW    Coxsackie virus strain VD2921; diabetogenic coxsackie B virus-4; CBV-4;
KW    strain VD2921; VP1; VP2; VP3; VP4;VP2A; P2B; P2C; P3A; P3B; P3C; P3D;

```


PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
XX
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 168
AAN70275/c
ID AAN70275 standard; DNA; 26 BP.
XX
AC AAN70275;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC059 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN EP227976-A.
PD 08-JUL-1987.
XX
PF 04-DEC-1986; 86EP-00116906.
XX
PR 05-DEC-1985; 85US-00805279.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R, Crosby W, Robertson JG;
XX
DR WPI; 1987-186567/27.
XX
CC Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
XX
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 168
AAN70275/c
ID AAN70275 standard; DNA; 26 BP.
XX
AC AAN70275;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC059 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN EP227976-A.
PD 08-JUL-1987.
XX
PF 04-DEC-1986; 86EP-00116906.
XX
PR 05-DEC-1985; 85US-00805279.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R, Crosby W, Robertson JG;
XX
DR WPI; 1987-186567/27.
XX
CC Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
XX
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 169
AAN92241/c
ID AAN92241 standard; DNA; 26 BP.
XX
AC AAN92241;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRC059.
XX
KW Probe MRC059; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..10
FT /tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 11..14
FT /tag= b
FT /note= "ribonucleotides."
FT misc_feature 15..26
FT /tag= c
FT /note= "deoxyribonucleotides."
XX
PN WO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
DR WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cyclizing sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRC059 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cyclizing sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
XX
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 169
AAN92241/c
ID AAN92241 standard; DNA; 26 BP.
XX
AC AAN92241;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRC059.
XX
KW Probe MRC059; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..10
FT /tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 11..14
FT /tag= b
FT /note= "ribonucleotides."
FT misc_feature 15..26
FT /tag= c
FT /note= "deoxyribonucleotides."
XX
PN WO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
DR WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cyclizing sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRC059 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cyclizing sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
XX
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

KW pelvic inflammatory disease; eczema; scleroderma; vasoconstriction;
 KW heart arrhythmia; congestive heart disease; muscle spasm; fatigue;
 KW chromosomal abnormality; gene therapy; PCR primer; ss.
 XX
 OS Homo sapiens.
 PN WO200125444-A2.
 XX
 PD 12-APR-2001.
 XX
 XX 06-OCT-2000; 2000WO-US027734.
 PF
 XX 07-OCT-1999; 99US-00414025.
 PR
 XX (ZYMO) ZYMOGENETICS INC.
 PA
 XX Presnell SR, Novak JE, Gao Z;
 PI
 XX WPI; 2001-266312/27.
 DR
 XX Novel human phosphodiesterase polypeptide, zcytor13 and polynucleotide
 PT encoding it, for detecting human chromosomal abnormalities, identifying
 PT modulators and treating inflammatory and cardiovascular diseases.
 PT
 XX Example 1C; Page 118; 122pp; English.
 PS
 XX The patent discloses novel human phosphodiesterase (PDE), zcytor13 cDNA
 CC and its corresponding protein. Zcytor13 protein is used to promote wound
 CC healing in tissues, to exhibit anti-bacterial and anti-viral effects and
 CC to identify modulators (e.g. agonists or antagonists). Zcytor13, its
 CC agonists or antagonists are useful in the treatment of inflammatory heart
 CC or cardiovascular conditions, muscle inflammation, inflammation during
 CC and after surgery, arthritis, asthma, inflammatory bowel disease or
 CC diverticulitis, for modulating spermatogenesis, sperm capacitation, as
 CC immunoc contraceptive or anti-fertility vaccine and for treating male
 CC infertility. Zcytor13 protein and its antibodies are used to diagnose
 CC cancer, reperfusion ischaemia, asthma, psoriasis and melanoma. Zcytor13
 CC proteins are used to enhance fertilisation. Zcytor13 antagonists are used
 CC to treat myocarditis, atherosclerosis, pelvic inflammatory disease (PID),
 CC psoriasis, eczema, scleroderma and other inflammatory diseases. Zcytor13
 CC sequences and/or its antibodies are useful for treatment of disorders
 CC associated with vasoconstriction, heart arrhythmia, congestive heart
 CC disease, muscle spasms and fatigue. They are used for detecting human
 CC chromosomal abnormalities. Zcytor13 cDNAs are used in gene therapy.
 CC Zcytor13-cytokine fusion proteins or antibody-cytokine fusion proteins
 CC are useful for enhancing in vivo killing of target tissue. The present
 CC sequence is a polyA PCR primer. ZC776db which is used to isolate full
 CC length zcytor13 cDNA by screening human placental cDNA library
 CC
 XX
 XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 173
 AAF23526/c
 ID AAF23526 standard; DNA; 26 BP.
 XX
 AC AAF23526;
 XX
 XX 22-MAR-2001 (first entry)
 DT
 XX Primer #4.
 DE
 XX Primer; mRNA; amplification; ss.
 KW
 XX Unidentified.
 OS

XX WO200075356-A1.
 PN 14-DEC-2000.
 XX
 PD 04-JUN-1999; 99WO-US012461.
 PF
 XX 04-JUN-1999; 99WO-US012461.
 PR
 XX (LINS/) LIN S.
 PA (YING/) YING S.
 PA (CHUO/) CHUONG C.
 PA (WIDE/) WIDELITZ R B.
 XX
 XX Lin S, Ying S, Chuong C, Widelitz RB;
 PI WPI; 2001-061734/07.
 XX
 DR Generating amplified messenger RNA sequences from single cells, involves
 XX cycling steps of reverse transcription, denaturation, double-stranded DNA
 PT sequences and in vitro transcription.
 PT
 XX Disclosure; Page 17; 31pp; English.
 PS
 XX The present invention relates to generating amplified messenger RNAs with
 CC polymerase reaction activity, comprising cycling steps of reverse
 CC transcription, denaturation, double-stranded cDNA synthesis and in vitro
 CC transcription. The invention is used for generating amplified mRNAs from
 CC limited mRNAs from single cells
 CC
 XX Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
 Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 174
 AAS20596/c
 ID AAS20596 standard; DNA; 26 BP.
 XX
 AC AAS20596;
 XX
 XX 23-APR-2002 (first entry)
 DT
 XX Human zsig63 cDNA sequencing primer ZC7764a.
 DE
 XX Human; zsig63; chromosome 4ql2-4ql3; salivary protein; antimicrobial; ss;
 KW microbial infection; tooth decay; periodontal disease; thrush; emphysema;
 KW gastrointestinal disease; urinary tract infection; vaginal infection;
 KW skin infection; epithelial wound; chronic tissue damage; cystic fibrosis;
 KW acquired immunodeficiency syndrome; AIDS; lung infection; sarcoidosis;
 KW chronic bronchitis; gene therapy; protein therapy; primer; ZC7764a.
 XX
 OS Homo sapiens.
 XX
 XX US6331413-B1.
 PN
 XX 18-DEC-2001.
 PD
 XX 17-MAR-2000; 2000US-00527345.
 PF
 XX 17-MAR-1999; 99US-0124820P.
 PR
 XX (ZYMO) ZYMOGENETICS INC.
 PA
 XX Adler DA, Sheppard FO;
 PI WPI; 2002-096707/13.
 XX
 DR

```

XX PT Polynucleotides encoding salivary proteins useful as anti-microbial
XX PS agents.
XX PS Example 1; Col 53; 29pp; English.
XX CC The invention relates to a polynucleotide derived from the 4q12-4q13
XX CC region of human chromosome 4 and encoding a zsig63 polypeptide, a
XX CC secreted salivary protein with anti-microbial activity. Due to their
XX CC microbial activity, the sequences can be used in the study of microbial
XX CC infections, e.g. for recombinant production of anti-microbial proteins.
XX CC The sequences can be used in the treatment of anti-microbial proteins.
XX CC disease, thrush, gastrointestinal disease, urinary tract infections,
XX CC vaginal infections, skin infections, epithelial wounds, chronic tissue
XX CC damage, acquired immunodeficiency syndrome (AIDS), cystic fibrosis, lung
XX CC infections, sarcoidosis, emphysema and chronic bronchitis. This sequence
XX CC represents a sequencing primer for cDNA encoding human zsig63
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
XX Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX RESULT 175
XX ABS52638/C
XX ID ABS52638 standard; DNA; 26 BP.
XX AC ABS52638;
XX XX
XX DT 15-NOV-2002. (first entry)
XX XX
XX DE Human secreted salivary protein zsig63 PCR primer ZC7764a.
XX KW Human; secreted salivary protein; zsig63; immunogen; zsig63-cytokine;
XX KW antibody-cytokine; in vivo killing; pathological microbe; bacteria;
XX KW fungal; viral; infection; salivary gland; anti-microbial; dental caries;
XX KW tooth decay; periodontal disease; thrush; gastrointestinal disease;
XX KW urinary tract infection; vaginal infection; skin infection; microflora;
XX KW epithelial wound; pathogenic colonisation; invasion; pro-inflammatory;
XX KW chronic tissue damage; vascular system; diabetes; anti-inflammatory;
XX KW incompetent immune system; AIDS; acquired immunodeficiency syndrome;
XX KW chemotherapy; radiation treatment; lung infection; cystic fibrosis;
XX KW digestion; PCR; primer; ss.
XX OS Homo sapiens.
XX XX
XX PN US2002081701-A1.
XX XX
XX PD 27-JUN-2002.
XX XX
XX PF 03-AUG-2001; 2001US-00922480.
XX XX
XX PR 17-MAR-1999; 99US-0124820P.
XX PR 17-MAR-2000; 2000US-00527345.
XX XX
XX PA (ADLE/) ADLER D A.
XX PA (SHEP/) SHEPPARD P O.
XX PI Adler DA, Sheppard PO;
XX XX
XX DR WPI; 2002-635468/68.
XX XX
XX PT Novel secreted salivary protein, zsig63 and polynucleotide encoding it
XX PT useful for treating microbial infections, inflammatory conditions, dental
XX PT caries and lung infections associated with cystic fibrosis.
XX PS Example 1; Page 29; 33pp; English.

```

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XX CC The present invention relates to a new secreted salivary protein, zsig63.
XX CC The invention is useful for detecting in a test sample, the presence of
XX CC an antagonist or agonist of zsig63 protein activity. The invention is
XX CC also useful as an immunogen for producing an antibody to zsig63
XX CC polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion
XX CC protein are useful for enhancing in vivo killing of target tissues.
XX CC Pharmaceutical composition comprising purified zsig63 polypeptide are
XX CC useful in the treatment of conditions associated with pathological
XX CC microbes, including bacterial, fungal and viral infections. High
XX CC expression of zsig63 in salivary gland suggests that anti-microbial
XX CC polypeptides are useful for treatment of dental caries (tooth decay),
XX CC periodontal disease, thrush and gastrointestinal disease. Other
XX CC applications can be used in urinary tract infections, vaginal infections,
XX CC prevention of infection in skin and other epithelial wounds. The
XX CC polypeptides can be used to establish normal microflora and protect
XX CC against pathogenic colonisation and invasion. The invention is useful
XX CC when pro-inflammatory activity is desired. Applications for such pro-
XX CC inflammatory activity include the treatment of chronic tissue damage,
XX CC particularly in areas having a limited or damaged vascular system e.g.,
XX CC damage in extremities associated with diabetes. Antagonists to zsig63
XX CC polypeptides may be useful as anti-inflammatory agents. The invention is
XX CC useful for the treatment of patients having incompetent immune system,
XX CC such as AIDS (acquired immunodeficiency syndrome) patients or individuals
XX CC that have undergone chemotherapy, radiation treatment. The invention is
XX CC also useful for the treatment of lung infections associated with cystic
XX CC fibrosis and its agonists or antagonists are useful for aiding digestion.
XX CC The present nucleic acid sequence represents a PCR primer that was used
XX CC in the methods of the invention for identification of zsig63
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
XX Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX RESULT 176
XX ABK66591
XX ID ABK66591 standard; DNA; 26 BP.
XX AC ABK66591;
XX XX
XX DT 02-JUL-2002 (first entry)
XX XX
XX DE Human gene specific PCR primer #679.
XX XX
XX KW Primer; ss; DNA microarray; differential expression analysis; human.
XX OS Homo sapiens.
XX XX
XX PN US6352829-B1.
XX XX
XX PD 05-MAR-2002.
XX XX
XX PF 05-JAN-1999; 99US-00225928.
XX XX
XX PR 21-MAY-1997; 97US-00859998.
XX XX
XX PA (CLON-) CLONTECH LAB INC.
XX PI Chenchik A, Johhadze G, Bibilashvili R;
XX XX
XX DR WPI; 2002-314699/35.
XX XX
XX PT Producing sub-population of labeled nucleic acids, useful for analyzing
XX PT differences in RNA profiles between several different physiological
XX PT sources, using set of distinct gene specific primers.
XX XX

```

```

PS Example 3; SEQ ID NO 679; lipp; English.
XX
CC The invention relates to producing a sub-population of labeled nucleic
CC acids (NAS) comprising contacting a NA sample from a physiological
CC source, with a pool of 50 distinct gene specific primers under suitable
CC conditions to enzymatically generate sub-population of NAS, where each
CC gene specific primer has a sequence complementary to a distinct mRNA, and
CC each labeled NA is generated using a single gene specific primer. The
CC method is useful for producing a sub-population of labeled NAS which is
CC useful for analysing the differences in the RNA profiles between several
CC different physiological sources, where the method comprises producing
CC subpopulation of labeled NAS for the different physiological sources,
CC comprising the populations for each physiological source to identify
CC differences in the population, where the comparison is preferably
CC performed by hybridising the labeled NAS for each of the distinct
CC physiological sources to an array of probe NAS stably associated with the
CC surface of a substrate to produce a hybridisation pattern for each of the
CC sources, and comparing the patterns for each of the sources, where
CC differential gene expression assays are utilised in differential
CC expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC tissue, or different tissue or subissue types. The present sequence is a
CC human gene specific PCR primer used in the method of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from USPTO
CC at http://wipo.seqdata.uspto.gov/sequence.html?DocID=635282981
XX
SQ Sequence 26 BP; 7 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2360 AGCAAGGGTACGCTGGCGAAGTTTCAC 2385
DB 1 AGCAAGGGTACGCTGGCGAAGTTTCAC 26

RESULT 177
AAB45055/c
ID AAD45055 standard; DNA; 26 BP.
XX
AC AAD45055;
XX
DT 27-DEC-2002 (first entry)
XX
DE ZC7764a primer used in the identification of human zsig63 DNA.
XX
KW Human; secreted salivary protein; zsig63 protein; host defense protein;
KW immune modulating factor; antipathogenic; cell-cell signalling molecule;
KW growth factor; cytokine; growth factor hormone activity; dental carries;
KW infection; tooth decay; periodontal disease; gastrointestinal disease;
KW thrush; urinary tract infection; vaginal infection; diabetes; obesity;
KW anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis;
KW gene therapy; salivary gland dysfunction; prostate gland dysfunction;
KW forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002090677-A1.
XX
PD 11-JUL-2002.
XX
PF 03-AUG-2001; 2001US-00923236.
XX
PR 17-MAR-1999; 99US-0124820P.
PR 17-MAR-2000; 2000US-00527345.
XX
PA (ADLER/) ADLER D A.
PA (SHEP/) SHEPPARD P O.
XX
PI Adler DA, Sheppard PO;
XX
DR WPI; 2002-642378/69.

XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial
XX agent for treating microbial infection, dental carries, periodontal
XX disease, thrush gastrointestinal disease, and for aiding digestion.
XX
XX Example 1; Page 30; 33pp; English.
XX
XX The invention relates to human secreted salivary polypeptide designated
XX as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63
XX can be used in detecting agonists and antagonists of its activity, and is
XX also useful as a host defense polypeptide, immune modulating factor,
XX antipathogenic polypeptide, cell-cell signalling molecule, growth factor,
XX cytokine, or as secreted extracellular matrix associated proteins with
XX growth factor hormone activity. It is useful for treating conditions
XX associated with pathological microbes, including bacterial, fungal and
XX viral infections, for treating dental carries (tooth decay), periodontal
XX disease, thrush and gastrointestinal disease, for treating urinary tract
XX infection, vaginal infection and for preventing infection in skin and
XX other epithelial wounds. zsig63 is useful for establishing normal
XX microflora and protect against pathogenic colonisation and invasion, for
XX treating chronic tissue damage e.g. damage in extremities associated with
XX diabetes and useful as anti-inflammatory agents. It is useful as a marker
XX of lung dysfunction, salivary gland dysfunction, or dysfunction of
XX prostate gland. It is also therapeutically useful for aiding digestion.
XX Polynucleotides of the invention are used in gene therapy for increasing
XX or inhibiting zsig63 activity, for detecting abnormalities on human
XX chromosome 4 associated with disease or other human traits and as
XX diagnostics in forensic DNA profiling. Sequences of the invention are
XX useful for stimulating proliferation or differentiation of cardiac
XX myocytes, for proliferation or differentiation of adipocytes and for
XX inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
XX present sequence is a primer used in the identification of human zsig63
XX DNA
XX
SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAAAAAAAAAAAAAA 2733
DB 26 TAAAAA AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 178
AAS20671/c
ID AAS20671 standard; DNA; 26 BP.
XX
AC AAS20671;
XX
DT 09-APR-2002 (first entry)
XX
DE Human zalphall Ligand sequencing primer ZC7764a.
XX
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
PN US6307024-B1.
XX
PD 23-OCT-2001.
XX
PF 09-MAR-2000; 2000US-00522217.
XX
PR 09-MAR-1999; 99US-0123547P.
PR 11-MAR-1999; 99US-0123904P.
PR 01-JUL-1999; 99US-0142013P.
XX
PA (ZYMO ) ZYMOGENETICS INC.

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XX PI Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnson JV, Nelson AJ, Dillon SR, Hammond AK;
XX DR WPI; 2002-040208/05.
XX
XX CC New zalphall ligand polypeptides and polynucleotides, useful for
XX PT stimulating proliferation, activation, differentiation and/or induction
XX PT of inhibition of specialized cell function, or for stimulating an
XX PT antigenic response.
XX PS Example 7; Col 139; 105pp; English.
XX
XX CC The present invention relates to the isolation of a novel cytokine,
XX CC zalphall ligand and the polynucleotide encoding it. The invention also
XX CC gives the sequence for the zalphall receptor and the polynucleotide
XX CC encoding it. The zalphall ligand polypeptide stimulates proliferation of
XX CC natural killer (NK) cells or NK cell progenitors, the activation of NK
XX CC cells, proliferation of T-cells, proliferation of B-cells stimulated with
XX CC anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
XX CC reduces proliferation of B-cells stimulated with anti-IGM antibodies. The
XX CC zalphall ligand polypeptide is also useful in preparing antibodies that
XX CC bind to zalphall ligand epitopes. The zalphall ligand polynucleotides can
XX CC be used as probes or primers to clone regions of a zalphall ligand gene,
XX CC and in gene therapy. Zalphall ligand may also be used to identify
XX CC inhibitors of its activity, to enhance the generation of anti-tumour
XX CC responses with or without the infusion of donor lymphocytes, and to
XX CC activate or stimulate the immune system. The present sequence represents
XX CC a sequencing primer used to sequence cDNA clones in the isolation of
XX CC human zalphall ligand
XX
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA..... 2733
Db 26 TAAAAA..... 1

RESULT 179
AAD43853/c
ID AAD43853 standard; DNA; 26 BP.
XX
XX AC AAD43853;
XX
XX DT 14-NOV-2002 (first entry)
XX
XX DE Primer #2 used to illustrate the method of the invention.
XX
XX KW Single stranded polynucleotide tag; cleavage agent; gene expression;
XX KW primer; ss.
XX
XX OS Unidentified.
XX
XX PN WO200259357-A2.
XX
XX PD 01-AUG-2002.
XX
XX PF 24-JAN-2002; 2002WO-DK000052.
XX
XX PR 24-JAN-2001; 2001DK-00000126.
XX
XX PR 12-FEB-2001; 2001US-0267704P.
XX
XX PA (GENO-) GENOMIC EXPRESSION APS.
XX
XX PI Pedersen ML;
XX
XX DR WPI; 2002-636542/68.
XX
XX PT Obtaining single stranded polynucleotide tags from a biological sample,

```

```

PT for analyzing gene expression or diagnosing clinical conditions,
PT comprises employing nicking endonucleases that cleave complementary
XX strands.
XX PS Example; Page 294; 302pp; English.
XX
XX CC The invention relates to a method for obtaining a single stranded
XX CC polynucleotide tag from a biological sample by cleaving one of the
XX CC complementary strands of a double stranded polynucleotide with a cleavage
XX CC agent capable of recognising a double stranded polynucleotide comprising
XX CC complementary strands and cleaving only one of the strands of the
XX CC polynucleotide in the process of generating a single stranded
XX CC polynucleotide tag. The method is useful for separating, analysing,
XX CC quantifying or obtaining single stranded polynucleotides comprising tags
XX CC originating partly, and preferably wholly from a source of DNA and/or RNA
XX CC in a sample comprising biological cells. The method is particularly for
XX CC analyzing gene expression (expression profiling or differential gene
XX CC expression), or in diagnosing clinical conditions. The present sequence
XX CC is a primer used in the exemplification of the invention
XX
XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA..... 2734
Db 26 AAAAAA..... 1

RESULT 180
ABZ24784/c
ID ABZ24784 standard; DNA; 26 BP.
XX
XX AC ABZ24784;
XX
XX DT 07-APR-2003 (first entry)
XX
XX DE Oligodeoxynucleic acid molecule ODN 24.
XX
XX KW Immunostimulant; oligodeoxynucleic acid; ODN; vaccine; DNA-RNA hybrid;
XX KW ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..26 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "thiophosphate backbone"
XX
XX PN WO200295027-A2.
XX
XX PD 28-NOV-2002.
XX
XX PF 17-MAY-2002; 2002WO-EP005448.
XX
XX PR 21-MAY-2001; 2001AT-00000805.
XX
XX PA (INTE-) INTERCELL BIOMEDIZINISCHE FORSCHUNGS.
XX PA (CIST-) CISTEM BIOTECHNOLOGIES GMBH.
XX
XX PI Lingnau K, Schellack C, Schmidt W;
XX
XX DR WPI; 2003-183880/18.
XX
XX PT New oligodeoxynucleic acid molecules useful for the preparation of
XX PT vaccine.
XX
XX PS Example 8; Page 32; 57pp; English.
XX
XX CC The present sequence is that of a thiosubstituted oligodeoxynucleic acid

```


CC (ODN) molecule, ODN 24, including deoxyuridine monophosphates. The
 CC invention is based on the discovery that ODNs containing deoxyuridine
 CC residues (U-ODNs) have an immunostimulatory effect comparable to, or in
 CC many instances greater than, ODNs containing CpG motifs, producing higher
 CC numbers of specific T cells to a given antigen. The U-ODNs do not induce
 CC the systemic production of pro-inflammatory cytokines and, in contrast to
 CC CpG ODNs, are not dependent on a specific motif or a palindromic
 CC sequence. Use of a U-ODN for the preparation of a vaccine is claimed.
 CC Combining the U-ODN with an antigen strongly increases the potential of
 CC the antigen to raise the protection/immune response of a vaccinated
 CC individual. An example of the invention demonstrated the generation of a
 CC specific immune response against a melanoma-derived peptide (see
 CC ABP58360) by injection of mice with the peptide in combination with ODN
 CC 24

XX Sequence 26 BP; 0 A; 0 C; 0 G; 1 T; 25 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
 |||||
 Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 181

ABX93599/c

ID ABX93599 standard; DNA; 26 BP.

AC ABX93599;

XX 28-MAY-2003 (first entry)

XX Human zsig63 PCR/sequencing primer ZC7764a.

XX ss; PCR; zsig63; adhesin; salivary gland; dental carries;
 KW periodontal disease; thrush; gastrointestinal disease; epithelial wound;
 KW urinary tract infection; vaginal infection; skin infection; primer;
 KW pro-inflammatory; chronic tissue damage; vascular system; diabetes; AIDS;
 KW lung infection; cystic fibrosis; lung dysfunction; digestive;
 KW salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
 KW chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
 KW cell culture media; gene therapy; human chromosome 4q12-4q13;
 KW dentinogenesis imperfecta; dentin dysplasia type II.

XX Synthetic.

XX US2002173027-A1.

XX 21-NOV-2002.

XX 03-AUG-2001; 2001US-00922469.

XX 17-MAR-1999; 99US-0124820P.

XX 17-MAR-2000; 2000US-00527345.

XX (ADLE/) ADLER D A.

XX (SHEP/) SHEPPARD P O.

XX Adler DA, Sheppard PO;

XX WPI; 2003-328428/31.

XX Novel isolated zsig63 polypeptide, member of the adhesin family, useful
 PT for treating dental carries, periodontal disease, thrush,
 PT gastrointestinal disease, urinary tract infections, vaginal infections,
 PT skin infections.

XX Example 1; Page 29; 32pp; English.

XX The invention relates to an isolated zsig63 polypeptide comprising at
 CC least 90% identity to an amino acid sequence which comprises domain 1 of

CC zsig63, domain 2, domain 3, mature zsig63 and full length zsig3. Also
 CC included are the polynucleotide encoding zsig63, a zsig63 expression
 CC vector, a cultured cell comprising the vector and expressing the protein,
 CC a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
 CC 126, 127-219 or 16-219 of zsig63 and an additional protein), using a
 CC zsig63 reporter gene construct to identify zsig63 agonists, and producing
 CC an anti-zsig63 antibody using zsig63 immunogenic peptides, zsig63 is
 CC useful for detecting in a test sample, the presence of antagonist of
 CC zsig63 protein activity. Zsig63 has antimicrobial activity and since
 CC exhibits high expression in salivary gland, can be used for treating
 CC dental carries, periodontal disease, thrush, and gastrointestinal
 CC disease, urinary tract infections, vaginal infections, skin infections
 CC and other epithelial wounds. The polypeptides can be used to establish
 CC normal microflora and protect against pathogenic colonization and
 CC invasion. Zsig63 can also be used for providing pro-inflammatory activity
 CC for treating chronic, tissue damage particularly in areas having limited
 CC or damaged vascular system, e.g. in diabetes, and for treating
 CC immunocompromised AIDS patients or in individuals that have undergone
 CC chemotherapy, radiation treatment, for treating lung infections e.g. in
 CC cystic fibrosis. Detection of zsig63 polypeptide at relatively high
 CC levels in the trachea may indicate that such polypeptides may serve as a
 CC marker of lung dysfunction. Zsig63 is also useful in diagnosing
 CC conditions associated with salivary gland or lung dysfunction including
 CC salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
 CC chronic bronchitis, prostate dysfunctions such as prostate
 CC adenocarcinoma, aiding digestion, and as components of defined cell
 CC culture media and may be used to replace serum that is commonly used in
 CC culture. The DNA is useful in gene therapy applications to increase or
 CC inhibit zsig63 activity, and for detecting abnormalities on human
 CC chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
 CC and dentin dysplasia type II). Zsig63 is an adhesin family member. The
 CC present sequence is a primer used to isolate and sequence nucleic acids
 CC encoding human zsig63

XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 182

ACA62282/c

ID ACA62282 standard; DNA; 26 BP.

XX ACA62282;

XX 12-AUG-2003 (first entry)

XX Oligo (dT) primer #1.

XX ss; PCR; primer; antisense therapy; mRNA expression profile;
 KW promoter containing primer.

XX Synthetic.

XX US2003022318-A1.

XX 30-JAN-2003.

XX 07-SEP-2001; 2001US-00949305.

XX 25-JAN-2000; 2000US-00494212.

XX (EPIC-) EPICLONE INC.

XX Lin S, Ying S;

XX WPI; 2003-479488/45.

XX Improved polymerase thermocycling reaction for nucleic acid
 PT amplification, by thermal cycling of promoter-linked nucleic acid
 PT template synthesis and in vitro transcriptional amplification of nucleic
 PT acid sequences.

XX Example 4; Page 14; 28pp; English.

XX The invention relates to an improved polymerase thermocycling reaction
 CC (M1) for linear amplification of nucleic acid sequences, involves
 CC denaturing a number of nucleic acid templates (I), combining the
 CC denatured (I) with a promoter-containing primer (P1), a primer (P2), a
 CC number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
 CC a reverse transcription enzyme, a DNA-dependent DNA polymerase and RNA
 CC polymerase, contacting P1 with (I) to generate a number of promoter-
 CC containing templates, denaturing the promoter-containing templates,
 CC contacting P2 with the denatured promoter-containing templates to
 CC generate a number of promoter-containing double-stranded DNA templates,
 CC where the double-stranded nucleic acid templates are flanked by P1 in one
 CC end and P2 in the other end of the other orientation, transcribing the
 CC promoter-containing double-stranded DNA templates to form a number of
 CC amplified RNA sequences, including the primer region of the promoter-
 CC containing double-stranded DNA templates, contacting the amplified RNA
 CC sequences with P2 to form a number of cDNAs and a number of DNA-RNA
 CC hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
 CC is useful for improved polymerase thermocycling reaction for linear
 CC amplification of nucleic acid sequences, and thus for producing mRNA
 CC expression profile of a cell by M1 to generate multiple copies of the
 CC mRNA. M1 is also useful for determining aberrant protein production of
 CC cells in a diseased state, by generating an expression profile by the
 CC above method, of cells in both normal and diseased states, comparing the
 CC expression profile of the cells in the normal and diseased states,
 CC determining the differences in mRNA compositions of cell(s) in the
 CC diseased state, isolating the mRNA sequences of cell(s) in the diseased
 CC state that differ from mRNA in cell(s) in non-diseased state, amplifying
 CC the isolated mRNA by M1, and determining aberrant protein function of the
 CC protein coded for by the isolated mRNA. M1 is also useful for treating a
 CC cell in a diseased state caused by aberrant protein production, by
 CC determining protein expression of a cell in a diseased state, determining
 CC the mRNA sequence for the aberrant proteins, synthesising an antisense
 CC sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
 CC delivering a pharmaceutically effective dosage of a composition
 CC comprising the anti-sense mRNA and a compatible lipid based biological
 CC carrier. M1 is also useful for predicting the efficacy of a proposed drug
 CC targeted against an aberrant protein, by determining aberrant protein
 CC production of cell in a diseased state by the above method, amplifying
 CC the aberrant protein by M1 and using recombinant techniques to determine
 CC the effect of proposed drug on the aberrant protein. M1 is also useful
 CC for differential screening of tissue-specific gene expression at a
 CC cellular level, for preparing labeled RNA/DNA probes for a gene chip
 CC technology, and for determining the efficacy of a drug regimen against a
 CC gene or its cDNAs. The present sequence is an Oligo (dT) primer used to
 CC produce second strand cDNA in the method of the invention

XX Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2734
 Db 26 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 183
 ADH44608/c

XX ADH44608 standard; DNA; 26 BP.

XX ADH44608;

XX 25-MAR-2004 (first entry)

XX

Human cDNA encoding Zalphall sequencing primer #2.

Human; ss; Zalphall ligand; Zalphall receptor; immune response;
 tumour progression; metastasis; tumour stasis; haematopoietic tumour;
 lymphoma; B cell tumour; systemic lupus erythematosus;
 rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
 immunocompromised patient; HIV infection; vaccine; primer.

Homo sapiens.

OS

US6605272-B2.

12-AUG-2003.

03-AUG-2001; 2001US-00923246.

09-MAR-1999; 99US-0123547P.

11-MAR-1999; 99US-0123904P.

01-JUL-1999; 99US-0142013P.

09-MAR-2000; 2000US-00522217.

(ZYMO) ZYMOGENETICS INC.

Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

WPI; 2003-895283/82.

Stimulating an immune response in a mammal exposed to an antigen or

pathogen, useful for enhancing anti-tumor activity resulting in reduced

tumor progression or metastasis, comprises administering zalphall ligand

polypeptide.

Example 7; SEQ ID NO 38; 103pp; English.

The invention relates to stimulating an immune response in a mammal

exposed to an antigen or pathogen comprising administering a composition

comprising mature zalphall ligand polypeptide comprising residues 32-162

of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an

immune response in a mammal exposed to an antigen or pathogen

(comprising: (a) determining (in)directly the level of antigen or

pathogen present in the mammal; (b) administering a composition

comprising zalphall ligand polypeptide in a pharmaceutical vehicle; (c)

determining (in)directly the level of antigen or pathogen in the mammal;

and (d) comparing the antigen or pathogen level in (a) with (b), where a

change in the level indicates stimulation of immune response), and

stimulating an immune response in a mammal exposed to an antigen or

pathogen (comprising: (a) determining a level of antigen- or pathogen-

specific antibody; (b) administering a composition comprising zalphall

ligand polypeptide in a pharmaceutical vehicle; (c) determining a post

administration level of the antigen- or pathogen-specific antibody; and

(d) comparing the level of the antibody in (a) with (b), where an

increase in the antibody level indicates stimulation of immune response).

The method is useful for stimulating an immune response in a mammal

exposed to an antigen or pathogen, and for enhancing anti-tumor activity

resulting in a reduction in tumour progression, decrease in metastasis,

or tumour stasis. The tumour may be a haematopoietic tumour, a lymphoma

or a B cell tumour. The zalphall ligand is useful for treating a wide

range of diseases arising from defects in the immune system, e.g.

systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or

diabetes, for boosting immunity to infectious diseases, treating

immunocompromised patients, such as HIV+ patients and in improving

vaccines. The present sequence is a sequencing primer used in the

exemplification of the invention.

Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2733

|||||

```

Db      26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 184
ADI00944/c
ID      ADI00944 standard; DNA; 26 BP.
XX
XX
AC      ADI00944;
XX
XX      22-APR-2004 (first entry)
XX
XX      Sequencing primer SEQ 38 used to analyse human zalphall ligand clone DNA.
DE
XX
XX      zalphall ligand; immunity; infectious disease; immunocompromised patient;
KW      HIV; vaccine; human; ss; PCR; primer.
XX
XX      Homo sapiens.
OS
XX
XX      US2003125524-A1.
PN
XX
XX      03-JUL-2003.
PD
XX
XX      15-NOV-2002; 2002US-00295723.
PF
XX
XX      09-MAR-2000; 2000US-00522217.
PR
XX
XX      (ZYMO ) ZYMOGENETICS INC.
PA
XX      Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
PI      Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX
XX      WPI; 2003-811003/76.
DR
XX
XX      New zalphall ligand polypeptides, useful for boosting immunity to
PT      infectious diseases, and treating immunocompromised patients, such as
PT      human immunodeficiency virus (HIV) patients, or in improving vaccines.
XX
XX      Example 7; SEQ ID NO 38; 113pp; English.
PS
XX
XX      The invention relates to a novel isolated zalphall ligand polypeptide.
CC      The polypeptide of the invention may be useful for boosting immunity to
CC      infectious diseases and treating immunocompromised patients, such as HIV
CC      patients, as well as in improving vaccines. The current sequence is that
CC      of the PCR primer which was used in the exemplification of the invention.
XX
XX      Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
      Query Match      0.9%; Score 26; DB 1; Length 26;
      Best Local Similarity 100.0%; Pred.No. 3.2e+02;
      Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
      |||||||
Db      26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 185
ADO47862/c
ID      ADO47862 standard; DNA; 26 BP.
XX
XX
AC      ADO47862;
XX
XX      29-JUL-2004 (first entry)
XX
XX      Gene expression inhibition associated poly(dT)-26mer primer.
DE
XX
XX      gene expression; gene expredasion inhibition;
KW      eukaryotic cell characteristic; cell division rate; pigmentation; cancer;
KW      microbial infection; viral pathogenic infection;
KW      cancer cell proliferation; poly(dT)-26mer primer; ss; primer.
XX
XX      Synthetic.
OS
XX

```

```

PN      US2004087526-A1.
XX
XX      06-MAY-2004.
PD
XX
XX      19-MAR-2003; 2003US-00393450.
PF
XX
XX      12-NOV-2001; 2001US-0351183P.
PR
XX      18-JAN-2002; 2002US-00052486.
XX
XX      (LINS/) LIN S.
PA      (JIHH/) JI H H.
XX
XX      Lin S, Ji HH;
PI
XX
XX      WPI; 2004-356242/33.
DR
XX
XX      Composition useful for inhibiting the expression of a targeted gene in a
PT      substrate, and for altering a characteristic of a eukaryote, comprises a
PT      DNA-RNA hybrid.
XX
XX      Example 5; SEQ ID NO 6; 40pp; English.
PS
XX
XX      The invention describes a composition (I) for inhibiting the expression of
CC      a targeted gene in a substrate, comprising a DNA-RNA hybrid. (I) is
CC      useful for inhibiting the expression of the targeted gene in a substrate.
CC      The substrate is a prokaryote such as a viral or bacterial cell, or
CC      eukaryote or the cell of the eukaryote such as a vertebrate. The
CC      eukaryote is a mouse, rat, chimpanzee, preferably a human being. (I) is
CC      useful for altering the characteristics of an eukaryotic cell. The
CC      characteristic is chosen from expression of a protein, cell division rate
CC      and pigmentation. (I) has an effect that lasts at least three days. (I)
CC      is useful to inhibit the expression of messenger RNA in a cell. The
CC      messenger RNA is transcribed from a gene chosen from viral gene,
CC      oncogene, enzyme. (I) is useful for suppressing cancers, by knocking out
CC      cancer related genes, for preventing and treating microbial infections,
CC      preferably reducing viral pathogenic infection and for reducing the
CC      proliferation of cancer cells. This sequence represents a poly(dT)-26mer
CC      primer used in the creation of DNA-RNA hybrids for controlling gene
CC      expression.
XX
XX      Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
SQ
      Query Match      0.9%; Score 26; DB 1; Length 26;
      Best Local Similarity 100.0%; Pred.No. 3.2e+02;
      Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
      |||||||
Db      26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 186
ADP19767/c
ID      ADP19767 standard; DNA; 26 BP.
XX
XX
AC      ADP19767;
XX
XX      26-AUG-2004 (first entry)
XX
XX      Human zalphall ligand PCR primer seqid 38.
DE
XX
XX      cytostatic; zalphall ligand; pharmaceutical; cancer; immune response;
KW      melanoma; tumour; solid tumour; haematopoietic tumour; lymphoma; human;
KW      PCR; primer; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2004110932-A1.
PN
XX
XX      10-JUN-2004.
PD
XX
XX      10-SEP-2003; 2003US-00659684.
PF
XX

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PR 09-MAR-1999; 99US-0123547P.
PR 11-MAR-1999; 99US-0123904P.
PR 01-JUL-1999; 99US-0142013P.
PR 09-MAR-2000; 2000US-00522217.
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
XX Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX WPI; 2004-440401/41.
XX
XX New zalphall ligand polynucleotide and polypeptide molecules, useful for
XX treating cancer, e.g. melanoma, solid tumor, hematopoietic tumor, or
XX lymphoma.
XX
XX Example 7; SEQ ID NO 38; 111pp; English.
XX
XX The invention describes an isolated polypeptide comprising a sequence of
XX amino acid residues that is at least 90 or 95% identical to residues 41
XX (Gln to 148 (Ile), or 32 (Gln) to 148 (Ile) of a sequence of 162 amino
XX acids (SEQ ID NO:2, human zalphall ligand), fully defined in the
XX specification. Also described are: a pharmaceutical composition
XX comprising the polypeptide, and a vehicle; a method of treating cancer in
XX a mammal; a method of stimulating an immune response in a mammal with
XX melanoma; a method of stimulating an immune response in a mammal bearing
XX a tumor; an isolated polynucleotide comprising a sequence of nucleotides
XX that encode amino acid residues cited above, where the polynucleotide
XX encodes a polypeptide that binds a receptor comprising 538 amino acids,
XX fully defined in the specification; a pharmaceutical composition
XX comprising the polynucleotide encoding, in a pharmaceutically acceptable
XX vehicle; an expression vector comprising the following operably linked
XX elements a control element; and a DNA segment comprising the
XX polynucleotide; and an isolated polynucleotide molecule comprising at
XX least 10 nucleotides of the polynucleotide sequence of 642 bp, fully
XX defined in the specification. The molecules, compositions and methods are
XX useful for treating cancer, e.g. melanoma, solid tumor, hematopoietic
XX tumor, or lymphoma. This sequence represents a primer used in the
XX expression cloning of human cytokine zalphall ligand.
XX
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
XX ||||||||||||||||||||||||||||
XX Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 187
XX ADQ80457
XX ID ADQ80457 standard; DNA; 26 BP.
XX AC ADQ80457;
XX XX
XX DT 09-SEP-2004 (first entry)
XX DE Da(26) biotin primer.
XX DE
XX KW RNA hybrid; self normalisation; five prime exon rescue; RNA linker; ss;
XX primer.
XX KW
XX OS Unidentified.
XX OS
XX PN WO2004053160-A2.
XX XX
XX PD 24-JUN-2004.
XX XX
XX PF 08-DEC-2003; 2003WO-GB005341.
XX XX
XX PR 06-DEC-2002; 2002GB-00028557.
XX

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XX (GENO-) GENOMICA SAU.
XX (RUFF/) RUFFLES G K.
XX
XX Jimenez MC, Escobar IG, Gallego SC, Cimadevilla JCR;
XX WPI; 2004-507018/48.
XX
XX Experimentally analyzing boundaries within polymeric DNA or RNA
XX molecules, useful in analyzing polymeric nucleic acid sequence
XX variations, comprises hybridizing different RNA molecules to provide RNA
XX / RNA hybrids.
XX
XX Disclosure; SEQ ID NO 14; 36pp; English.
XX
XX The present invention relates to experimentally analysing boundaries
XX within polymeric DNA or RNA molecules comprises hybridizing first and
XX second different RNA molecules, derived from first and second samples, to
XX provide RNA / RNA hybrids. The product of the method above is used as a
XX probe. The method is useful in experimentally analysing boundaries within
XX polymeric DNA or RNA molecules. The methods are useful in analysing
XX polymeric nucleic acid sequence variations and in identifying molecules
XX of therapeutic interest. The present sequence represents a RNA primer of
XX the invention.
XX
XX SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
XX ||||||||||||||||||||||||
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26
XX
XX RESULT 188
XX ADV96391/C
XX ID ADV96391 standard; DNA; 26 BP.
XX AC ADV96391;
XX XX
XX DT 10-MAR-2005 (first entry)
XX DE Human zalphall ligand-specific PCR primer - SEQ ID 38.
XX DE
XX KW stem cell; cell culture; PCR; primer; ss; zalphall ligand.
XX KW
XX OS Homo sapiens.
XX OS
XX PN US2004260065-A1.
XX XX
XX PD 23-DEC-2004.
XX XX
XX PF 26-FEB-2004; 2004US-00787442.
XX XX
XX PR 09-MAR-1999; 99US-0123547P.
XX PR 11-MAR-1999; 99US-0123904P.
XX PR 01-JUL-1999; 99US-0142013P.
XX PR 09-MAR-2000; 2000US-00522217.
XX
XX (NOVA/) NOVAK J E.
XX (PRES/) PRESNELL S R.
XX (SPRE/) SPRECHER C A.
XX (FOST/) FOSTER D C.
XX (HOLL/) HOLLY R D.
XX (GROS/) GROSS J A.
XX (JOHN/) JOHNSTON J V.
XX (NELS/) NELSON A J.
XX (DILL/) DILLON S R.
XX (HAMM/) HAMMOND A K.
XX
XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
XX

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PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
 XX WPI; 2005-038783/04.
 XX
 XX New zalpha 11 Ligand fusion protein, useful for stimulating the
 PT proliferation and/or development of hematopoietic cells in vitro and in
 PT vivo, and in autologous marrow culture.
 XX
 XX Example 7; SEQ ID NO 38; 110pp; English.
 XX
 CC The invention comprises a fusion protein that contains a zalphall ligand
 CC and a cytokine polypeptide (e.g. IL-2, IL-4, IL-15 or GM-CSF), the fusion
 CC protein of the invention binds to the human receptor protein. The protein
 CC of the invention is useful for stimulating the proliferation and/or
 CC development of hematopoietic cells. The protein of the invention is also
 CC useful in autologous marrow culture. The present DNA sequence represents
 CC a PCR primer that was used in an example of the invention.
 XX
 XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 DB 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 189
 ADY96657/c
 ID ADY96657 standard; DNA; 26 BP.
 XX
 XX ADY96657;
 XX
 XX 02-JUN-2005 (first entry)
 XX
 DE Human Zsig63 cDNA cloning and sequencing primer, ZC7764a.
 XX
 XX Zsig63; microbial infection; tooth disease; antibacterial; mouth disease;
 XX dental carries; candida infection; fungicide; infection;
 KW periodontal disease; antiinflammatory; mouth disease;
 KW gastrointestinal disease; gastrointestinal-gen.; urinary tract infection;
 KW antimicrobial; uropathic; genitourinary disease;
 KW female genital tract infection; antimicrobial; gynecology and obstetrics;
 KW skin infection; dermatological; dermatological disease; wound healing;
 KW vulnery; injury; acquired immune deficiency syndrome; anti-hiv;
 KW immune disorder; cancer; cytostatic; neoplasm; lung infection;
 KW antimicrobial; respiratory-gen.; respiratory disease; gene therapy;
 KW primer; ss.
 XX
 XX Homo sapiens.
 XX
 XX US2005065322-A1.
 XX
 XX 24-MAR-2005.
 XX
 XX 20-OCT-2004; 2004US-00969164.
 XX
 XX 17-MAR-1999; 99US-0124820P.
 PR 17-MAR-2000; 2000US-00527345.
 PR 03-AUG-2001; 2001US-00923236.
 XX
 XX (ZYMO) ZYMOGENETICS INC.
 XX
 XX Adler DA, Sheppard PO;
 PI
 XX WPI; 2005-241320/25.
 DR
 XX New polynucleotide (I) encoding a zsig63 polypeptide, useful for
 PT diagnosing and treating microbial infections, e.g. dental carries,
 PT thrush, gastrointestinal disease, skin infection, or epithelial wounds,
 PT AIDS, lung infections, or cancer.

XX Example 1; SEQ ID NO 7; 33pp; English.
 PS
 XX
 CC The present invention relates to zsig63, a novel secreted salivary
 CC protein and its encoding polynucleotide. Zsig63 is a member of the
 CC adhesin family. The invention is useful for diagnosing and treating
 CC microbial infections such as dental carries, periodontal disease, thrush,
 CC gastrointestinal disease, urinary tract infection, vaginal infection,
 CC skin infection or epithelial wounds and lung disfunctions such as AIDS.
 CC Lung infections and cancer. The invention is also useful in gene therapy.
 CC The present sequence is human Zsig63 cDNA cloning and sequencing primer.
 CC This sequence is used in the identification of Zsig63 using an EST
 CC sequence to obtain the full-length Zsig63.
 XX
 XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 DB 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 190
 AEE86842
 ID AEE86842 standard; DNA; 26 BP.
 XX
 XX AEE86842;
 XX
 XX 23-FEB-2006 (first entry)
 DT
 XX
 XX Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #17.
 DE
 KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
 XX
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Cy3"
 FT
 XX DE102004025746-A1.
 PN
 XX 15-DEC-2005.
 PD
 XX 26-MAY-2004; 2004DE-10025746.
 PF
 XX 26-MAY-2004; 2004DE-10025746.
 PR
 XX (CHER/) CHERKASOV D.
 PA (HENN/) HENNIG C.
 PA (GENO-) GENOVXX GMBH.
 XX
 XX Cherkasov D, Hennig C, Baeuml E;
 PI
 XX WPI; 2006-040183/05.
 DR
 XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
 PT -matrix extension, using a solid phase with reduced non-specific binding
 PT of labeled components.
 XX
 XX Disclosure; Page 97; 144pp; German.
 PS
 XX This invention relates to a novel method for parallel sequence analysis
 CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
 CC The SP is useful for multiple parallel sequencing of nucleic acids and
 CC shows reduced non-specific binding of labeled or unlabeled nucleotides
 CC and nucleic acids, so the background remains low even after prolonged
 CC repeated contact of the solid phase with high concentrations of labeled

```

CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ .Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match      0.9%; Score 26; DB 1; Length 26;
  Best Local Similarity 100.0%; Pred. No. 3.2e+02;
  Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
    |||||
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 191
AEE86828
ID AEE86828 standard; DNA; 26 BP.
XX
AC AEE86828;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #3.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= Cy3"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHEN/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHEN/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
DR WPI; 2006-040183/05.
XX
PT Parallel sequencing of nucleic acids by optical methods, by cyclic primer
PT -matrix extension, using a solid phase with reduced non-specific binding
PT of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ .Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match      0.9%; Score 26; DB 1; Length 26;
  Best Local Similarity 100.0%; Pred. No. 3.2e+02;
  Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
    |||||

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Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 192
AEE86844
ID AEE86844 standard; DNA; 26 BP.
XX
AC AEE86844;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #2.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= Cy3"
XX
PN DE102004025745-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025745.
XX
PR 26-MAY-2004; 2004DE-10025745.
XX
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
PA (CHEN/) CHERKASOV D.
XX
PI Cherkasov D, Hennig C;
XX
PD WPI; 2006-040182/05.
XX
PT Surface of solid phase, useful for parallel, optical analysis of many
PT nucleic acids, has reduced non-specific binding of labeled components.
XX
PS Disclosure; Page 62; 88pp; German.
XX
CC This invention relates to a novel surface of a solid phase (SP), useful
CC in methods for parallel analysis of many individual nucleic acids (NA) by
CC optical methods. The novel SP is useful for multiple parallel sequencing
CC of nucleic acids and shows reduced non-specific binding of labeled or
CC unlabeled nucleotides and nucleic acids. The present sequence is that of
CC an oligonucleotide which was used in the development of the novel solid
CC phase of the invention.
XX
SQ .Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match      0.9%; Score 26; DB 1; Length 26;
  Best Local Similarity 100.0%; Pred. No. 3.2e+02;
  Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
    |||||
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 193
AEE86858
ID AEE86858 standard; DNA; 26 BP.
XX
AC AEE86858;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #16.
XX

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KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Cy3"
XX
XX DE102004025745-A1.
XX
XX PN
XX
XX PD
XX
XX 15-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX (HENN/) HENNIG C.
XX (GENO-) GENOVORX GMBH.
XX (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many
XX nucleic acids, has reduced non-specific binding of labeled components.
XX
XX PS Disclosure; Page 62; 88pp; German.
XX
XX This invention relates to a novel surface of a solid phase (SP), useful
XX in methods for parallel analysis of many individual nucleic acids (NA) by
XX optical methods. The novel SP is useful for multiple parallel sequencing
XX of nucleic acids and shows reduced non-specific binding of labeled or
XX unlabeled nucleotides and nucleic acids. The present sequence is that of
XX an oligonucleotide which was used in the development of the novel solid
XX phase of the invention.
XX
XX SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
XX ||||||||||||||||||||||||||||
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26
XX
XX RESULT 194
XX AEF12154
XX ID AEF12154 standard; DNA; 26 BP.
XX
XX AC AEF12154;
XX
XX 09-MAR-2006 (first entry)
XX
XX DE Oligonucleotide dA26-Cy3.
XX
XX KW DNA detection; DNA sequencing; primer; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "labelled with Cy3"
XX
XX PN DE102004025744-A1.
XX
XX PD 29-DEC-2005.

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XX 26-MAY-2004; 2004DE-10025744.
XX
XX PR 26-MAY-2004; 2004DE-10025744.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVORX GMBH.
XX
XX PI Cherkasov D, Hennig C;
XX
XX WPI; 2006-081126/09.
XX
XX Surface of a solid support, useful for multiple parallel analysis of
XX nucleic acids by optical methods, having low non-specific binding of
XX labeled components.
XX
XX PS Disclosure; Page 62; 88pp; German.
XX
XX This invention describes a novel solid support surface for parallel
XX analysis of many individual nucleic acids by optical methods. The
XX invention also describes; a) a solid phase in which the surface shows
XX reduced non-specific binding of labeled components; b) methods for
XX preparing the novel solid support and c) methods of parallel analysis of
XX many nucleic acid by optical methods, using the solid support. The
XX surface of the solid support is made of silica, glass, silicon dioxide or
XX Si-OH; is flat and has nucleic acid chains fixed to it, optionally
XX through a linker. The solid phase is preferably part of a device that
XX allows fluid exchange and it is permeable to light in the wavelength
XX regions 200-400; 200-2000 or 400-800 nm. An external layer of solid
XX support is removed, then the nucleic acid is coupled to it, optionally
XX after attachment of a linker layer. Alternatively, after removing the
XX external layer, nucleic acids are synthesized on the surface by cyclic
XX coupling, optionally after attachment of a linker, and in either case,
XX additional substances (specifically phosphate, sulfate or carboxy-
XX containing monomers or polymers) can be coupled to the surface, after
XX attachment or synthesis of nucleic acids. Only part of the surface is
XX removed, particularly by a chemical reaction with hydrofluoric acid or
XX sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick.
XX Particularly after removal of the surface layer, the surface is not dried
XX and all subsequent steps are done in a liquid phase. The nucleic acids
XX analyzed represent a single population or many different populations and
XX contains 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long
XX and is e.g. a branched or linear polymer; (strept)avidin or a nucleic
XX acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or
XX dideoxyribo-nucleoside triphosphates, in which the label is cleavable.
XX Particularly analysis involves cyclic sequencing and a preferred method
XX comprises: binding nucleic acid to the solid support, with formation of a
XX extensible primer-matrix complex; performing cyclic reactions and
XX reconstructing the nucleic acid sequence. The sequences being analyzed
XX contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic
XX acid sequences that function as primers for the sequencing reaction;
XX alternatively the nucleic acid is fixed to the support and then
XX hybridized with a primer. The incorporated nucleotide includes a
XX reversible terminating group so that only one nucleotide can be
XX incorporated in each step. The surface is specifically used for multiple
XX parallel sequencing of nucleic acids. The surface shows reduced non-
XX specific binding of labeled and unlabeled nucleotides or nucleic acids,
XX so assay sensitivity is improved. This sequence represents an
XX oligonucleotide used to illustrate the method of the invention.
XX
XX SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
XX ||||||||||||||||||||||||||||
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26
XX
XX RESULT 195

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AEF94771
ID AEF94771 standard; DNA; 26 BP.
XX
AC AEF94771;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= 5'-Cy3
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185819/20.
XX
XX Optical fluorescent parallel process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 5; Page 66; 94pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 196
AEF94785
ID AEF94785 standard; DNA; 26 BP.
XX
AC AEF94785;
XX
XX 20-APR-2006 (first entry)
XX
XX

```

```

DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185819/20.
XX
XX Optical fluorescent parallel process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 67; 94pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 197
AEF94769
ID AEF94769 standard; DNA; 26 BP.
XX
AC AEF94769;
XX
XX 20-APR-2006 (first entry)
XX
XX

```

Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
Unidentified.
Synthetic.

```

FH Key modified_base 1 Location/Qualifiers
FT FT /*tag= b
FT FT /mod_base= 5'-Cy3
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185818/20.
XX
XX Optical fluorescent ultra-high parallel process to analyse nucleic acid
XX chains in which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 68; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence reconstructed using the signals. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dA26-Cy3 which was used in the
XX development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 198
AEF94755
ID AEF94755 standard; DNA; 26 BP.
AC AEF94755;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
XX Unidentified.
XX Synthetic.
XX
XX Key modified_base 1 Location/Qualifiers
FT FT /*tag= a
FT FT /mod_base= 5'-Cy3
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.

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XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185818/20.
XX
XX Optical fluorescent ultra-high parallel process to analyse nucleic acid
XX chains in which a sample solid is bound with a primer-matrix complex.
XX
XX Example 5; Page 67; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dA26-Cy3 which was used in the
XX development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 199
AEF94730
ID AEF94730 standard; DNA; 26 BP.
XX
XX AEF94730;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
XX Unidentified.
XX Synthetic.
XX
XX Key modified_base 1 Location/Qualifiers
FT FT /*tag= b
FT FT /mod_base= 5'-Cy3
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.

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XX Cherkasov D, Hennig C, Baeuml E;
PI WPI; 2006-185820/20.
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
PT Example 2; Page 95; 141pp; German.
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 200
AEF94716
ID AEF94716 standard; DNA; 26 BP.
XX AEF94716;
XX 20-APR-2006 (first entry)
XX Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX Unidentified.
XX Synthetic.
XX Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= 5'-Cy3
FT
XX DE102004025696-A1.
XX 23-FEB-2006.
XX 26-MAY-2004; 2004DE-10025696.
XX 26-MAY-2004; 2004DE-10025696.
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVORX GMBH.
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
PT

```

```

XX Example 5; Page 95; 141pp; German.
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 201
AAV71935/C
ID AAV71935 standard; DNA; 27 BP.
XX AAV71935;
XX 18-FEB-1999 (first entry)
XX Anchored poly T RT-PCR primer.
XX Normalised; cDNA library; mRNA cloning; reverse transcription;
XX immobilise; screening; hybridisation; nucleic acid amplification;
XX expression pattern; drug development; PCR primer; RT-PCR; ss.
XX Synthetic.
XX WO9851789-A2.
XX 19-NOV-1998.
XX 13-MAY-1998; 98WO-DK000186.
XX 13-MAY-1997; 97DK-00000547.
XX 19-MAY-1997; 97US-00871030.
XX 27-MAR-1998; 98DK-00000432.
XX (DISP-) DISPLAY SYSTEMS BIOTECH APS.
XX Warthoe PR;
XX WPI; 1999-009772/01.
XX Preparation of normalised, subdivided cDNA libraries from mRNA - by
XX reverse transcription and amplification, used to screen for new genes and
XX interacting proteins, potential drugs, and for diagnosis.
XX Example 1; Page 29; 71pp; English.
XX The invention relates to preparation of a normalised, subdivided library
XX of amplified cDNA from the coding regions of mRNA in a sample. The method
XX involves reverse transcription, with at least one cDNA primer of formula
XX 5'-Con1-dTn2-Vn3-Nn4 to form first stand cDNA where Con1 = any sequence
XX of 1-100 nucleotides; dT = deoxythymidyl; n2 is at least 1; n3 and n4
XX are both 0, or n3 is 1 and n4 is at least 1; followed by second strand
XX cDNA synthesis using the first strand as template and a second cDNA

```

CC primer of a similar formula, in the presence of DNA polymerase I (or its
 CC Klenow fragment) and amplification of double-stranded cDNA with a set of
 CC amplification primers. Comparison of cDNA in the prepared library with a
 CC database (a computer-generated list of molecular weights of restricted
 CC DNA fragments of known sequence) is used to determine presence of an
 CC expressed protein in a cell, also to detect changes in such expression
 CC (particularly for diagnosis of disease). Surfaces (chip) having amplified
 CC cDNA stably immobilised on it, obtained by a similar method, are used to
 CC screen for genes of a particular family, by hybridisation with nucleic
 CC acid from the family (to identify new genes) and to detect differences in
 CC expression patterns between cells. The polypeptides expressed by the
 CC libraries can be used for drug development. Sequences AAV71935 to
 CC AAV71946 represent primers used to exemplify the method of the invention
 XX
 SQ Sequence 27 BP; 2 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 3.3e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 202

AAV59216/c

ID AAV59216 standard; DNA; 29 BP.

AC AAV59216;

XX 14-DEC-1998 (first entry)

DE Linear multimer produced by rolling circle synthesis.

XX ss; RNA oligonucleotide; probe; standard; diagnostic; therapeutic agent.

XX Synthetic.

XX WO9838300-A1.

XX 03-SEP-1998.

XX 26-FEB-1998; 98WO-US003784.

XX 26-FEB-1997; 97US-00805631.

XX (UYRP) UNIV ROCHESTER.

XX Kool ET;

XX WPI; 1998-481202/41.

XX Synthesis of oligonucleotide(s) - using a single-stranded circular
 PT oligonucleotide template ribonucleotide triphosphate(s) and a
 PT polymerase to form multimer(s) which can be cleaved.

XX Example 2; Page 36; 100pp; English.

XX The linear multimer was produced by rolling circle synthesis in an
 CC example of the method of the invention for synthesising an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template comprising at least one copy of a nucleotide
 CC sequence complementary to the sequence of the desired RNA oligonucleotide
 CC with at least 2 types of ribonucleotide triphosphate and a polymerase
 CC enzyme to yield a single-stranded RNA oligonucleotide multimer
 CC complementary to the circular oligonucleotide template, where the RNA
 CC oligonucleotide multimer comprises multiple copies of the desired RNA
 CC oligonucleotide. The methods can be used for producing RNA
 CC oligonucleotides having a specific sequence and well defined ends. The
 CC RNA oligonucleotides produced can be used as probes, standards and
 CC diagnostic or therapeutic agents. They can be used for modifying the
 CC structure or function of a target molecule. They can also be used to

CC cleave disease-associated RNA, DNA or protein

XX Sequence 29 BP; 0 A; 0 C; 2 G; 27 T; 0 U; 0 Other;

SQ Query Match 0.9%; Score 25.8; DB 1; Length 29;

Best Local Similarity 93.1%; Pred. No. 3.5e+02;

Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737

Db 29 AAAAAAAAAAACCAAAAAAAAAAAAAAAAAA 1

RESULT 203

ADC65873/c

ID ADC65873 standard; DNA; 29 BP.

XX AC ADC65873;

XX 18-DEC-2003 (first entry)

DE DNA oligonucleotide #6.

XX RNA oligonucleotide synthesis; ribonucleotide triphosphate; polymerase;

KW electroporation; calcium phosphate treatment; lipid-mediated delivery;

KW cation-mediated delivery; bacterial infection; viral infection;

KW drug resistant infection; double stranded DNA oligomer; ss.

XX Synthetic.

XX US2003087241-A1.

XX 08-MAY-2003.

XX 30-NOV-2001; 2001US-00997931.

XX 15-APR-1993; 93US-00047860.

PR 23-FEB-1995; 95US-00393439.

PR 26-FEB-1997; 97US-00805631.

PR 11-MAY-2000; 2000US-00569344.

XX (UYRP) UNIV ROCHESTER.

XX Kool ET;

XX WPI; 2003-755141/71.

XX Synthesizing RNA oligonucleotide involves combining single-stranded
 PT circular oligonucleotide, ribonucleotide triphosphate and polymerase
 PT enzyme to yield desired RNA complementary to circular oligonucleotide
 PT template.

XX Example 2; SEQ ID NO 6; 78pp; English.

XX The invention relates to a method for synthesising an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template with at least two types of ribonucleotide
 CC triphosphate and a polymerase enzyme to yield a single-stranded RNA
 CC oligonucleotide multimer complementary to the circular oligonucleotide
 CC template, where the RNA oligonucleotide multimer comprises multiple
 CC copies of the desired RNA oligonucleotide. The method is useful for
 CC synthesising an RNA oligonucleotide with well-defined ends. The circular
 CC oligonucleotide is introduced into the cell using direct injection,
 CC electroporation, calcium phosphate treatment, lipid-mediated delivery, or
 CC cation-mediated delivery. The method is useful for treating bacterial
 CC and/or viral infections in mammals, particularly drug resistant
 CC infections, and for producing double stranded DNA oligomers. The method
 CC is performed in the absence of an oligonucleotide primer, or without the
 CC addition of auxiliary proteins. This sequence represents an
 CC oligonucleotide used in the method of the invention.

XX Sequence 29 BP; 0 A; 0 C; 2 G; 27 T; 0 U; 0 Other;

```

Query Match          0.9%; Score 25.8; DB 1; Length 29;
Best Local Similarity 93.1%; Pred. No. 3.5e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
    ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 29 AAAAAAAAAAACAAACAAAAAAAAAAAAAAAAACAA 1

RESULT 204
AD081065/c
XX AD081065 standard; DNA; 29 BP.
AC AD081065;
XX
XX 29-JUL-2004 (first entry)
XX Cow prion protein microsatellite locus primer #77.
XX
XX gene typing; polymorphic microsatellite loci; PML;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT7-blue-vector; cow;
XX microsatellite; PCR; primer; ss.
XX
XX Bos taurus.
XX
XX DE10236711-A1.
XX
XX 26-FEB-2004.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX (UYHO-) UNIV HOHENHEIM.
XX
XX Geldermann H, Preuss S, Han Y;
XX WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
XX Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and
XX determining the length of the resulting amplicon(s). Also described are:
XX a method of determining (M2) microsatellite markers (MM) for
XX predisposition to a disease, associated with a gene that includes one or
XX more PML; and prediagnosis (M3) of diseases associated with gene that
XX include PML. The method is used to identify microsatellite markers, in a
XX disease-related gene, that are associated with a predisposition to
XX diseases and for prediagnosis of such diseases, especially prion diseases
XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX metabolic diseases; also to type genes that encode milk proteins,
XX hormones or transcription factors. The method is simpler, quicker and
XX particularly less expensive than known methods based on sequencing. This
XX sequence represents a primer used to genotype a region of the cow prion
XX protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX Sequence 29 BP; 0 A; 2 C; 0 G; 27 T; 0 U; 0 Other;

Query Match          0.9%; Score 25.8; DB 1; Length 29;
Best Local Similarity 93.1%; Pred. No. 3.5e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
    ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 29 AAAAAAAAAAACAAACAAAAAAAAAAAAAAAAACAA 1

RESULT 206
AAQ83940
ID AAQ83940 standard; DNA; 30 BP.

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Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAGAGAAAAA 1

RESULT 205
AD081069/c
XX AD081069 standard; DNA; 29 BP.
XX
XX AD081069;
XX
XX 29-JUL-2004 (first entry)
XX Cow prion protein microsatellite locus primer #81.
XX
XX gene typing; polymorphic microsatellite loci; PML;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT7-blue-vector; cow;
XX microsatellite; PCR; primer; ss.
XX
XX Bos taurus.
XX
XX DE10236711-A1.
XX
XX 26-FEB-2004.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX (UYHO-) UNIV HOHENHEIM.
XX
XX Geldermann H, Preuss S, Han Y;
XX WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
XX Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and
XX determining the length of the resulting amplicon(s). Also described are:
XX a method of determining (M2) microsatellite markers (MM) for
XX predisposition to a disease, associated with a gene that includes one or
XX more PML; and prediagnosis (M3) of diseases associated with gene that
XX include PML. The method is used to identify microsatellite markers, in a
XX disease-related gene, that are associated with a predisposition to
XX diseases and for prediagnosis of such diseases, especially prion diseases
XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX metabolic diseases; also to type genes that encode milk proteins,
XX hormones or transcription factors. The method is simpler, quicker and
XX particularly less expensive than known methods based on sequencing. This
XX sequence represents a primer used to genotype a region of the cow prion
XX protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX Sequence 29 BP; 0 A; 2 C; 0 G; 27 T; 0 U; 0 Other;

Query Match          0.9%; Score 25.8; DB 1; Length 29;
Best Local Similarity 93.1%; Pred. No. 3.5e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
    ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAGAGAAAAA 1

RESULT 206
AAQ83940
ID AAQ83940 standard; DNA; 30 BP.

```

```
XX AC AAQ83940;
XX DT 25-MAR-2003 (revised)
XX DT 04-OCT-1995 (first entry)
XX DE Oligonucleotide clamp o, for producing comb-type brached polymer.
XX KW HIV; pol; nef; oligonucleotide clamp; branched; macromolecule; ss.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /*note= "Modified with SP(O-)(=O)-"
XX PN WO9501365-A1.
XX PD 12-JAN-1995.
XX PF 05-JUL-1994; 94WO-US007557.
XX PR 02-JUL-1993; 93US-00087386.
XX PA (LYNX-) LYNX THERAPEUTICS INC.
XX PI Gryaznov SM;
XX DR WPI; 1995-060944/08.
XX XX Synthesis of branched polymers and novel branched polymeric structures -
XX FT used as molecular probes esp. for detecting poly-nucleotide (s).
XX PS Example 8; Page 33; 52pp; English.
XX CC The sequences given in AAQ83938, AAQ83952 and AAQ83940 are used in the
XX CC construction of an oligonucleotide clamp. The clamp is a comb-type
XX CC branched polymer which has 3' termini and was used to bind a target
XX CC sequence comprising a segment of the HIV pol and nef genes in single
XX CC stranded or double stranded forms. An oligonucleotide clamp is a compound
XX CC capable of forming a covalently closed macromolecule or a stable circular
XX CC complex after specifically binding to the target polynucleotide.
XX CC Oligonucleotide clamps generally comprise one or more oligonucleotide
XX CC moieties capable of specific binding to the target molecule and one or
XX CC more pairs of binding moieties covalently linked to the oligonucleotide
XX CC moieties. Upon annealing of the oligonucleotides moieties to the target
XX CC polynucleotide, the binding moieties of a pair are bought into
XX CC juxtaposition so that they form a stable covalent or non-covalent linkage
XX CC or complex. The interaction of the binding moieties effectively clamps
XX CC the specifically annealed oligonucleotide moieties to the target
XX CC polynucleotide. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 30 BP; 27 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.1%; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 2 ACACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 207
ADA26181/c
ID ADA26181 standard; DNA; 30 BP.
XX AC ADA26181;
XX DT 20-NOV-2003 (first entry)
XX DE Rice semi-dwarf (ed-1) DNA fragment SEQ ID NO:26.
XX KW genotype; plant; rice; semi-dwarf; sd-1; polymorphism; detection;
XX KW characteristic; single nucleotide polymorphism; SNP; genotyping;
XX OS chromosome 1; gene; ds.
XX OS Synthetic.
XX OS Oryza sativa.
XX PN WO2003070934-A1.
XX PD 28-AUG-2003.
XX PF 07-FEB-2003; 2003WO-JP001317.
XX PR 25-FEB-2002; 2002JP-00048115.
XX PA (PLAN-) PLANT GENOME CENT CO LTD.
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XX KW Oligonucleotide clamp; ds.
XX OS Unidentified.
XX PN US6180777-B1.
XX PD 30-JAN-2001.
XX PF 03-JAN-1997; 97US-00787321.
XX PR 12-JAN-1996; 96US-0009918P.
XX PA (FARB ) BAYER CORP.
XX PI Horn T;
XX DR WPI; 2001-201911/20.
XX CC Synthesizing branched nucleic acids useful as diagnostic and molecular
XX CC probes, involves combining first units having haloalkylamino groups and
XX CC second units having thiol or phosphorothioate groups.
XX PS Example 8; Col 19; 20pp; English.
XX CC The present invention relates to a method for synthesising a branched or
XX CC multiply connected macromolecular structure, comprising oligonucleotide
XX CC clamps (OC). The macromolecular structure is capable of specifically
XX CC binding to a target molecule, and can therefore be used as probes. At
XX CC least one OC comprises a target binding sequence that binds specifically
XX CC and stably with the target molecule, and at least two OCs comprise signal
XX CC generation moieties capable of generating a detectable signal in the
XX CC presence of the target molecule. In addition the OCs are connected to one
XX CC another by thioalkylamino, or thiophosphorylalkylamino bridges. The
XX CC present sequence is an OC used in the present invention
XX SQ Sequence 30 BP; 27 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.1%; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 2 ACACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 208
ADA26181/c
ID ADA26181 standard; DNA; 30 BP.
XX AC ADA26181;
XX DT 20-NOV-2003 (first entry)
XX DE Rice semi-dwarf (ed-1) DNA fragment SEQ ID NO:26.
XX KW genotype; plant; rice; semi-dwarf; sd-1; polymorphism; detection;
XX KW characteristic; single nucleotide polymorphism; SNP; genotyping;
XX OS chromosome 1; gene; ds.
XX OS Synthetic.
XX OS Oryza sativa.
XX PN WO2003070934-A1.
XX PD 28-AUG-2003.
XX PF 07-FEB-2003; 2003WO-JP001317.
XX PR 25-FEB-2002; 2002JP-00048115.
XX PA (PLAN-) PLANT GENOME CENT CO LTD.
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XX PI Minobe Y, Monna L, Kitazawa N, Yoshino R, Suzuki J;
XX XX WPI; 2003-697617/66.
XX DR
XX PT Judging the genotype of a region around a plant sd-1 gene with
XX PT polymorphism-obtained markers isolated by positional cloning, useful in
XX PT genotyping for examination of semi-dwarf character of rice.
XX PS Disclosure; Page 15; 104pp; Japanese.
XX CC
XX CC The present invention describes a method for judging the genotype of a
XX CC region around a plant semi-dwarf (sd-1) gene in which polymorphisms are
XX CC present, by detecting the polymorphisms. Also described: (1) examining
XX CC semi-dwarf characteristics of a plant using the judgment method with
XX CC detection of polymorphisms; (2) oligonucleotides for amplifying sd-1 DNA
XX CC regions, which are primers for judging the genotype of a region around a
XX CC plant sd-1 gene; (3) reagents for judging the genotype of a region around a
XX CC plant sd-1 gene containing these oligonucleotides; and (4) reagents for
XX CC examining the semi-dwarf character of a plant containing the
XX CC oligonucleotides. The method is for judging the genotype of a region
XX CC around a plant sd-1 gene, which is applicable in genotyping by (d)CAPS
XX CC ((derived) cleaved amplified polymorphic sequence) for examination of the
XX CC semi-dwarf character of rice to identify desirable strains e.g. with high
XX CC crop yield, pest resistance and resistance to flooded water. The method
XX CC is easy and quick, in which a seedling is required for studying single
XX CC nucleotide polymorphisms (SNPs) for genotyping, without needing
XX CC cultivation of seedling to fully-grown plant for judging heterozygote and
XX CC distinguishing morphology. The present sequence represents a rice sd-1
XX CC DNA fragment, which is given in the exemplification of the present
XX CC invention. Rice sd-1 is located on chromosome 1.
XX SQ Sequence 30 BP; 0 A; 3 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.18; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 30 AAAAAAAAAAGAGAAAAAAAAAAAAAAAAAAAAA 2

RESULT 209
AAQ87894/c
ID AAQ87894 standard; DNA; 32 BP.
AC AAQ87894;
XX
XX 25-MAR-2003 (revised)
DT 29-NOV-1995 (first entry)
XX
XX Normalised library first strand cDNA synthesis primer.
DE
XX
XX Normalised cDNA library; directionally cloned cDNA library; screening;
KW hybridisation; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 15..18
FT /*tag= a
FT /note= "characteristic sequence identifier"
XX
XX WO9508647-A1.
XX
XX 30-MAR-1995.
PD
XX
XX 23-SEP-1994; 94WO-US010821.
PF
XX
XX 24-SEP-1993; 93US-00126594.
PR
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
PA

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```

XX SOARES MB, Efstratiadis A;
XX WPI; 1995-139615/18.
XX
XX New normalised directional cDNA libraries - used for isolating novel
XX cDNA's, including tissue-specific and development-specific DNA.
XX PS Disclosure; Page 45; 186pp; English.
XX CC
XX CC Human tissues were obtained for construction of a variety of cDNA
XX CC libraries, including infant brain, adult brain and adult hippocampus.
XX CC Each of the cDNA libraries had a characteristic sequence identifier,
XX CC provided by the oligonucleotide utilised to prime first strand cDNA
XX CC synthesis (see AAQ87894-Q87907 for these primer sequences; all these
XX CC primers have the PacI restriction site for directional cloning of cDNAs).
XX CC Each of the libraries was propagated in the form of single-stranded (ss)
XX CC circles and normalised separately by a novel method. The method
XX CC comprises: generating fragments complementary to the 3' non-coding
XX CC sequence of the ss circles in the library to produce partial duplexes;
XX CC purifying the partial duplexes; melting and reassociating them to
XX CC appropriate Cot; and purifying the unassociated ss circles to generate a
XX CC normalised cDNA library. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 32 BP; 4 A; 0 C; 0 G; 28 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.6; DB 1; Length 32;
Best Local Similarity 87.5%; Pred. No. 3.8e+02;
Matches 28; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAATTTAATTAAGAAAAA 1

RESULT 210
ABX79828/c
ID ABX79828 standard; cDNA; 27 BP.
XX
XX AC ABX79828;
XX
XX 17-APR-2003 (first entry)
DT
XX
XX EST polymorphic DNA repeat polynucleotide #153.
DE
XX
XX EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
XX polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
XX Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
XX Haw River syndrome; Huntington's disease; fragile-X syndrome;
XX Fredreich's ataxia; myotonic dystrophy; hyperandrogenaemia;
XX spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX
XX Homo sapiens.
OS
XX
XX US6472154-B1.
PN
XX
XX 29-OCT-2002.
PD
XX
XX 31-DEC-1999; 99US-00475947.
PF
XX
XX 31-DEC-1999; 99US-00475947.
PR
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
PA
XX
XX Garner HR, Wren JD, Minna JD, Fondon JW;
PI WPI; 2003-208818/20.
XX
XX Identifying a candidate polymorphic repeat within a coding sequence, for
XX understanding or treating genetic disease, comprises detecting tandem
XX repeats in a target coding sequence and scoring the repeats for
XX polymorphic probability.
XX

```


Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 213

ABS52637/c

XX ABS52637 standard; DNA; 26 BP.

AC ABS52637;

XX 15-NOV-2002 (first entry)

DT

XX Human secreted salivary protein zsig63 PCR primer ZC7321.

DE

XX Human; secreted salivary protein; zsig63; immunogen; zsig63-cytokine; antibody-cytokine; in vivo killing; pathological microbe; bacteria; fungal; viral; infection; salivary gland; anti-microbial; dental caries; tooth decay; periodontal disease; thrush; gastrointestinal disease; urinary tract infection; vaginal infection; skin infection; microflora; epithelial wound; pathogenic colonisation; invasion; pro-inflammatory; chronic tissue damage; vascular system; diabetes; anti-inflammatory; incompetent immune system; AIDS; acquired immunodeficiency syndrome; chemotherapy; radiation treatment; lung infection; cystic fibrosis; digestion; PCR; primer; ss.

XX Homo sapiens.

OS

XX US2002081701-A1.

PN

XX 27-JUN-2002.

PD

XX 03-AUG-2001; 2001US-00922480.

PF

XX 17-MAR-1999; 99US-0124820P.

PR

XX 17-MAR-2000; 2000US-00527345.

PR

XX (ADLE/) ADLER D A.

PA

XX (SHEP/) SHEPPARD P O.

PA

XX Adler DA, Sheppard PO;

PI

XX WPI; 2002-635468/68.

DR

XX Novel secreted salivary protein, zsig63 and polynucleotide encoding it useful for treating microbial infections, inflammatory conditions, dental caries and lung infections associated with cystic fibrosis.

PT

XX Example 1; Page 29; 33pp; English.

PS

XX The present invention relates to a new secreted salivary protein, zsig63. The invention is useful for detecting in a test sample, the presence of an antagonist or agonist of zsig63 protein activity. The invention is also useful as an immunogen for producing an antibody to zsig63 polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion protein are useful for enhancing in vivo killing of target tissues. Pharmaceutical composition comprising purified zsig63 polypeptide are useful in the treatment of conditions associated with pathological microbes, including bacterial, fungal and viral infections. High expression of zsig63 in salivary gland suggests that anti-microbial polypeptides are useful for treatment of dental caries (tooth decay), periodontal disease, thrush and gastrointestinal disease. Other applications can be used in urinary tract infections, vaginal infections, prevention of infection in skin and other epithelial wounds. The polypeptides can be used to establish normal microflora and protect against pathogenic colonisation and invasion. The invention is useful when pro-inflammatory activity is desired. Applications for such pro-inflammatory activity include the treatment of chronic tissue damage, particularly in areas having a limited or damaged vascular system e.g., damage in extremities associated with diabetes. Antagonists to zsig63 polypeptides may be useful as anti-inflammatory agents. The invention is useful for the treatment of patients having incompetent immune system, such as AIDS (acquired immunodeficiency syndrome) patients or individuals that have undergone chemotherapy, radiation treatment. The invention is also useful for the treatment of lung infections associated with cystic

CC fibrosis and its agonists or antagonists are useful for aiding digestion. CC The present nucleic acid sequence represents a PCR primer that was used CC in the methods of the invention for identification of zsig63

XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733

Db :|||||:|||||:|||||:|||||:|||||

26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 214

AAD45054/c

ID AAD45054 standard; DNA; 26 BP.

XX

AC AAD45054;

XX

XX 27-DEC-2002 (first entry)

DT

XX

XX ZC7321 primer used in the identification of human zsig63 DNA.

DE

XX Human; secreted salivary protein; zsig63 protein; host defense protein; immune modulating factor; antipathogenic; cell-cell signalling molecule; growth factor; cytokine; growth factor hormone activity; dental caries; infection; tooth decay; periodontal disease; gastrointestinal disease; thrush; urinary tract infection; vaginal infection; diabetes; obesity; anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis; gene therapy; salivary gland dysfunction; prostate gland dysfunction; forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.

XX Homo sapiens.

OS

XX US2002090677-A1.

PN

XX 11-JUL-2002.

PD

XX 03-AUG-2001; 2001US-00923236.

PF

XX 17-MAR-1999; 99US-0124820P.

PR

XX 17-MAR-2000; 2000US-00527345.

PR

XX (ADLE/) ADLER D A.

PA

XX (SHEP/) SHEPPARD P O.

PA

XX Adler DA, Sheppard PO;

PI

XX WPI; 2002-642378/69.

DR

XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial agent for treating microbial infection, dental caries, periodontal disease, thrush gastrointestinal disease, and for aiding digestion.

PT

XX Example 1; Page 29; 33pp; English.

PS

XX The invention relates to human secreted salivary polypeptide designated as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63 can be used in detecting agonists and antagonists of its activity, and is also useful as a host defense polypeptide, immune modulating factor, antipathogenic polypeptide, cell-cell signalling molecule, growth factor, cytokine, or as secreted extracellular matrix associated proteins with growth factor hormone activity. It is useful for treating conditions associated with pathological microbes, including bacterial, fungal and viral infections, for treating dental caries (tooth decay), periodontal disease, thrush and gastrointestinal disease, for treating urinary tract infection, vaginal infection and for preventing infection in skin and other epithelial wounds. zsig63 is useful for establishing normal microflora and protect against pathogenic colonisation and invasion, for treating chronic tissue damage e.g. damage in extremities associated with diabetes and useful as anti-inflammatory agents. It is useful as a marker

CC of lung dysfunction, salivary gland dysfunction, or dysfunction of
 CC prostate gland. It is also therapeutically useful for aiding digestion.
 CC Polynucleotides of the invention are used in gene therapy for increasing
 CC or inhibiting zsig63 activity, for detecting abnormalities on human
 CC chromosome 4 associated with disease or other human traits and as
 CC diagnostics in forensic DNA profiling. Sequences of the invention are
 CC useful for stimulating proliferation or differentiation of cardiac
 CC myocytes, for proliferation or differentiation of adipocytes and for
 CC inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
 CC present sequence is a primer used in the identification of human zsig63
 CC DNA
 XX
 SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
 Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 215
 ABX93598/C
 ID ABX93598 standard; DNA; 26 BP.
 XX
 AC ABX93598;
 XX
 DT 28-MAY-2003 (first entry)
 XX
 DE Human zsig63 PCR/sequencing primer ZC7231.
 XX
 KW ss; PCR; zsig63; adhesin; salivary gland; dental carries;
 KW periodontal disease; thrush; gastrointestinal disease; epithelial wound;
 KW urinary tract infection; vaginal infection; skin infection; primer;
 KW pro-inflammatory; chronic tissue damage; vascular system; diabetes; AIDS;
 KW lung infection; cystic fibrosis; lung dysfunction; digestive;
 KW salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
 KW chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
 KW cell culture media; gene therapy; human chromosome 4q12-4q13;
 KW dentinogenesis imperfecta; dentin dysplasia type II.
 XX
 OS Synthetic.
 XX
 XX US2002173027-A1.
 XX
 XX 21-NOV-2002.
 XX
 XX 03-AUG-2001; 2001US-00922469.
 XX
 XX 17-MAR-1999; 99US-0124820P.
 XX 17-MAR-2000; 2000US-00527345.
 XX
 XX (ADLE/) ADLER D A.
 XX (SHEP/) SHEPPARD P O.
 XX
 XX Adler DA, Sheppard PO;
 XX
 XX WPI; 2003-328428/31.
 XX
 XX Novel isolated zsig63 polypeptide, member of the adhesin family, useful
 XX for treating dental carries, periodontal disease, thrush,
 XX gastrointestinal disease, urinary tract infections, vaginal infections,
 XX skin infections.
 XX
 XX Example 1; Page 29; 32pp; English.
 XX
 XX The invention relates to an isolated zsig63 polypeptide comprising at
 XX least 90% identity to an amino acid sequence which comprises domain 1 of
 XX zsig63, domain 2, domain 3, mature zsig63 and full length zsig63. Also
 XX included are the polynucleotide encoding zsig63, a zsig63 expression
 XX vector, a cultured cell comprising the vector and expressing the protein,
 CC

CC a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
 CC 126, 127-219 or 16-219 of zsig63 and an additional protein), using a
 CC zsig63 reporter gene construct to identify zsig63 agonists, and producing
 CC an anti-zsig63 antibody using zsig63 immunogenic peptides, zsig63 is
 CC useful for detecting in a test sample, the presence of antagonist of
 CC zsig63 protein activity. Zsig63 has antimicrobial activity and since
 CC exhibits high expression in salivary gland, can be used for treating
 CC dental carries, periodontal disease, thrush, and gastrointestinal
 CC disease, urinary tract infections, vaginal infections, skin infections
 CC and other epithelial wounds. The polypeptides can be used to establish
 CC normal microflora and protect against pathogenic colonization and
 CC invasion. Zsig63 can also be used for providing pro-inflammatory activity
 CC for treating chronic, tissue damage particularly in areas having limited
 CC or damaged vascular system, e.g. in diabetes, and for treating
 CC immunocompromised AIDS patients or in individuals that have undergone
 CC chemotherapy, radiation treatment, for treating lung infections e.g. in
 CC cystic fibrosis. Detection of zsig63 polypeptide at relatively high
 CC levels in the trachea may indicate that such polypeptides may serve as a
 CC marker of lung dysfunction. Zsig63 is also useful in diagnosing
 CC conditions associated with salivary gland or lung dysfunction including
 CC salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
 CC chronic bronchitis, prostate dysfunctions such as prostate
 CC adenocarcinoma, aiding digestion, and as components of defined cell
 CC culture media and may be used to replace serum that is commonly used in
 CC culture. The DNA is useful in gene therapy applications to increase or
 CC inhibit zsig63 activity, and for detecting abnormalities on human
 CC chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
 CC and dentin dysplasia type II). Zsig63 is an adhesin family member. The
 CC present sequence is a primer used to isolate and sequence nucleic acids
 CC encoding human zsig63
 XX
 SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
 Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 216
 ACF36382/C
 ID ACF36382 standard; DNA; 26 BP.
 XX
 AC ACF36382;
 XX
 XX 04-DEC-2003 (first entry)
 XX
 XX Nucleotide sequence of a second back primer.
 DE
 XX Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
 KW electrophoresis; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003064691-A2.
 XX
 XX 07-AUG-2003.
 XX
 XX 28-JAN-2003; 2003WO-1B000843.
 XX
 XX 29-JAN-2002; 2002US-0352215P.
 XX
 XX (GLOB-) GLOBAL GENOMICS AB.
 XX
 XX Linnarsson S, Ernfor P, Bauren G, Meteis A, Pihlak A;
 XX Montellius A;
 XX
 XX WPI; 2003-618365/58.
 XX
 XX Producing a population of double-stranded product DNA molecules, useful
 PT

PT for mRNA profiling, comprises amplification by nested polymerase chain
 PT reaction.

PS Claim 6; Page 85; 105pp; English.

CC The invention relates to producing a population of double-stranded
 CC product DNA molecules comprising amplification by a nested PCR method.
 CC The method is useful in profiling mRNA transcribed in a system under
 CC investigation. The oligonucleotides are used as size standards in
 CC electrophoresis, and as internal controls allowing for calculation of
 CC relative amounts of material present. The present sequence represents a
 CC specific example of a PCR primer used in the method of the invention

XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
 :
 Db 26 BAAAAA

RESULT 217

AAD55692/c

ID AAD55692 standard; DNA; 26 BP.

XX AC AAD55692;

XX XX

DT 27-OCT-2003 (revised)

DT 07-AUG-2003 (first entry)

XX XX Bovine viral diarrhea virus gene 5' end amplifying PCR primer.

KW Bovine Viral Diarrhea Virus; BVDV; infection; vaccine; prophylaxis;
 KW gene therapy; PCR; primer; ss.

OS Pestivirus type 1.

XX XX WO2003023041-A2.

XX XX 20-MAR-2003.

XX XX 05-SEP-2002; 2002WO-EP009925.

XX XX 06-SEP-2001; 2001DE-01043813.

XX XX (BOEH) BOEHRINGER INGELHEIM VETMEDICA GMBH.

XX XX Elbers K, Meyer C, Von Freyburg M, Meyers G;

XX XX WPI; 2003-333043/31.

XX New DNA molecule useful for manufacturing a vaccine for the prophylaxis
 PT and treatment of Bovine Viral Diarrhea Virus (BVDV) infections, comprises
 PT a sequence complementary to a BVDV RNA.

XX XX Example 1; Page 20; 73pp; English.

CC The invention relates to a DNA molecule containing a sequence
 CC complementary to a Bovine Viral Diarrhea Virus (BVDV) RNA. The RNA when
 CC introduced into susceptible host cells, induces the generation of
 CC infectious BVDV particles. The attenuated BVDV clone or strain is useful
 CC in the manufacture of a vaccine for the prophylaxis and treatment of BVDV
 CC infections. The invention is useful in gene therapy. The present sequence
 CC is a PCR primer used to amplify BVDV gene. (Updated on 27-OCT-2003 to
 CC standardise OS field)

XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
 :
 Db 26 BAAAAA

RESULT 218

ADY96656/c

ID ADY96656 standard; DNA; 26 BP.

XX XX

AC ADY96656;

XX XX

DT 02-JUN-2005 (first entry)

XX XX Human Zsig63 cDNA cloning and sequencing primer, ZC7231.

XX Zsig63; microbial infection; tooth disease; antibacterial; mouth disease;
 KW dental carries; candida infection; fungicide; infection;
 KW periodontal disease; antiinflammatory; mouth disease;
 KW gastrointestinal disease; genitourinary disease;
 KW antimicrobial; uropathic; genitourinary disease;
 KW female genital tract infection; antimicrobial; gynecology and obstetrics;
 KW skin infection; dermatological; dermatological disease; wound healing;
 KW vulnery; injury; acquired immune deficiency syndrome; anti-hiv;
 KW immune disorder; cancer; cytostatic; neoplasm; lung infection;
 KW antimicrobial; respiratory-gen.; respiratory disease; gene therapy;
 KW primer; ss.

XX XX

OS Homo sapiens.

XX XX US2005065322-A1.

XX XX 24-MAR-2005.

XX XX 20-OCT-2004; 2004US-00969164.

XX XX 17-MAR-1999; 99US-0124820P.

XX XX 17-MAR-2000; 2000US-00527345.

XX XX 03-AUG-2001; 2001US-00923236.

XX XX (ZYMO) ZYMOGENETICS INC.

XX XX Adler DA, Sheppard PO;

XX XX WPI; 2005-241320/25.

XX New polynucleotide (I) encoding a zsig63 polypeptide, useful for
 PT diagnosing and treating microbial infections, e.g. dental carries,
 PT thrush, gastrointestinal disease, skin infection, or epithelial wounds,
 PT AIDS, lung infections, or cancer.

XX XX Example 1; SEQ ID NO 6; 33pp; English.

XX The present invention relates to zsig63, a novel secreted salivary
 CC protein and its encoding polynucleotide. Zsig63 is a member of the
 CC adhesin family. The invention is useful for diagnosing and treating
 CC microbial infections such as dental carries, periodontal disease, thrush,
 CC gastrointestinal disease, urinary tract infection, vaginal infection,
 CC skin infection or epithelial wounds and lung disfunctions such as AIDS,
 CC lung infections and cancer. The invention is also useful in gene therapy.
 CC This sequence is used in the identification of zsig63 using an EST
 CC sequence to obtain the full-length Zsig63.

XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
 :
 Db 26 BAAAAA

```
Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 219
ABQ76254/c
ID ABQ76254 standard; DNA; 27 BP.
XX
AC ABQ76254;
XX
DT 08-NOV-2002 (first entry)
XX
DE Murine SCCE 5'-RACE oligonucleotide SEQ ID 42.
XX
KW SCCE; murine; stratum corneum chymotryptic enzyme; kallikrein 7;
KW serine protease; transgenic mammal; skin; skin disease; skin cancer;
KW hyperkeratosis; acanthosis; epidermal inflammation; dermal inflammation;
KW pruritus; atopic dermatitis; eczema; acne; itch; KLUK7; ss.
XX
OS Mus musculus.
XX
PN WO200262135-A2.
XX
PD 15-AUG-2002.
XX
PF 08-FEB-2002; 2002WO-IB001300.
XX
PR 09-FEB-2001; 2001CA-02332655.
PR 09-FEB-2001; 2001DK-00000218.
XX
PA (EGEL/) EGELRUD T.
PA (HANS/) HANSSON L.
XX
XX Egelrud T, Hansson L;
XX
XX WPI; 2002-643380/69.
XX
PT Transgenic mammal or its embryo useful as model for human disease, has
PT heterologous nucleotide sequence coding for stratum corneum chymotryptic
PT enzyme operably linked to promoter that drives its expression in skin.
XX
XX Example 6; Page 36; 74pp; English.
XX
CC This invention describes a novel non-human transgenic mammal or mammalian
CC embryo having integrated within its genome, a heterologous nucleotide
CC sequence comprising at least a significant part of a nucleotide sequence
CC coding for a stratum corneum chymotryptic enzyme (SCCE) or its variant,
CC operably linked to a promoter that drives expression of heterologous scce
CC or its variant in skin. The product of the invention is useful as a model
CC for the study of disease with the aim of improving treatment, to relieve
CC or ameliorate a pathogenic condition, for development or testing of a
CC cosmetic or a pharmaceutical formulation, and for the development of a
CC diagnostic method. It can also be used as a model for a skin disease or
CC skin cancer. The invention is also useful for screening or identifying a
CC compound or composition effective for the prevention or treatment of an
CC abnormal or unwanted phenotype, and for screening or identifying a
CC compound or composition effective for the prevention or treatment of
CC inflammatory skin diseases selected from diseases consisting of epidermal
CC hyperkeratosis, acanthosis, epidermal inflammation, dermal inflammation,
CC pruritus, atopic dermatitis, eczema, acne and inherited skin diseases
CC with epidermal hyperkeratosis. The mammal of the invention is also useful
CC as a model for further studies of lch mechanisms and the testing of
CC potential compounds and compositions for relieve of various skin diseases
CC where itch is a component. This sequence represents a 5' RACE cDNA
CC synthesis primer used in a method of detecting homologues to human
CC stratum corneum chymotryptic enzyme, SCCE, gene. SCCE is a serine
CC protease synonymous with human kallikrein 7 (KLUK7) and is used in the
CC development of the transgenic mammals described in the invention
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 3.7e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 221
AAQ95960/c
ID AAQ95960 standard; DNA; 25 BP.
XX
AC AAQ95960;
XX
DT 06-FEB-1996 (first entry)
XX
DE Oligonucleotide biotin-t25 for novel nucleic acid immobilisation method.
XX
KW Immobilisation; solid support; salt; cationic detergent; capture probe;
KW hybridisation; primer; template-dependent extension; target organism;
KW sequencing; genetic polymorphism; ss.
XX
OS Synthetic.
XX

Query Match 0.9%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 3.7e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
:|||||
Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 220
AEA37617/c
ID AEA37617 standard; DNA; 27 BP.
XX
AC AEA37617;
XX
DT 28-JUL-2005 (first entry)
XX
DE Tea tree tubulin oligonucleotide #1.
XX
KW ss; tubulin; biochip.
XX
OS Melaleuca alternifolia.
XX
PN CN1552861-A.
XX
PD 08-DEC-2004.
XX
PF 18-DEC-2003; 2003CN-01109578.
XX
PR 18-DEC-2003; 2003CN-01109578.
XX
PA (TEAC-) TEA INST CHINESE AGRIC ACAD.
XX
PI Chen L, Xu Y, Zhao L;
XX
XX WPI; 2005-197097/21.
XX
PT Tubulin differential expression sequence label of tea tree and biological
PT chip.
XX
XX Example 4; Page 19; 25pp; Chinese.
XX
CC The invention relates to specific expressive sequential labels of tubulin
CC of tea tree and their biochips. The invention can be used in evaluation
CC of crop seed sources, early prediction of hybrid vigor, research on plant
CC resistance, determination of plant SNP, inspection of transgenic crop
CC security, and screen of herbicides and agro-chemicals, etc. The present
CC sequence represents a tea tree tubulin oligonucleotide.
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 3.7e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
:|||||
Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 221
AAQ95960/c
ID AAQ95960 standard; DNA; 25 BP.
XX
AC AAQ95960;
XX
DT 06-FEB-1996 (first entry)
XX
DE Oligonucleotide biotin-t25 for novel nucleic acid immobilisation method.
XX
KW Immobilisation; solid support; salt; cationic detergent; capture probe;
KW hybridisation; primer; template-dependent extension; target organism;
KW sequencing; genetic polymorphism; ss.
XX
OS Synthetic.
XX
```

Key	misc_feature	Location/Qualifiers		
PH		1		
FT		/*tag= a		
FT		/note= "biotinylated"		
XX				
PN	WO9515970-A1.			
XX				
PD	15-JUN-1995.			
XX				
PF	06-DEC-1994;	94WO-US014096.		
XX				
PR	06-DEC-1993;	93US-00162397.		
PR	16-NOV-1994;	94US-00341148.		
XX				
PA	(MOLE-) MOLECULAR TOOL INC.			
XX				
PI	Nikiforov T, Knapp MR;			
XX				
DR	WPI; 1995-224282/29.			
XX				
PT	Immoblising synthetic nucleic acid on solid support - by incubation in presence of salt or cationic detergent, for use in hybridisation assays, sequencing and analysis of polymorphism.			
PT				
XX				
PS	Example 1; Page 18; 61pp; English.			
XX				
CC	Oligonucleotides AAQ95959-82 are examples of oligonucleotides used in a novel method of immobilising oligonucleotides to a solid support by incubating in the presence of a salt or cationic detergent e.g. NaCl (50-250 mM, pH 6.0-8.0) or 1-ethyl-3-(3'-dimethyl amino propyl)-1,3 carbodiimide hydrochloride (ECD). The oligonucleotides can be capture probes for detection of specific nucleic acids by hybridisation or can be primers for template-dependent extension from the immobilised primers on nucleic acid from a target organism. The method can be used in hybridisation assays, sequencing and analysis of genetic polymorphism			
XX				
SQ	Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;			
Query Match 0.9%; Score 25; DB 1; Length 25;				
Best Local Similarity 100.0%; Pred. No. 3.7e+02;				
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0				
Qy	2709	AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733		
Db	25	AAAAAAAAAAAAAAAAAAAAAAAAAAAA 1		
RESULT 222				
AAx84259/c				
ID	AAx84259 standard; DNA; 25 BP.			
XX				
AC	AAx84259;			
XX				
DT	08-SEP-1999 (first entry)			
XX				
DE	PCR primer for human Nck associated protein 1 coding sequence.			
XX				
KW	Nck associated protein 1; Napi; human; apoptosis; Alzheimer's disease; therapy; PCR primer; ss.			
KW				
XX				
OS	Synthetic.			
OS	Homo sapiens.			
XX				
PN	WO9931239-A1.			
XX				
PD	24-JUN-1999.			
XX				
PF	14-DEC-1998;	98WO-JP005646.		
XX				
PR	15-DEC-1997;	97JP-00363183.		
XX				
PA	(KYOW) KYOWA HAKKO KOGYO KK. (SAKA/) SAKAKI Y.			

XX Sakaki Y;
PI
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
PT Alzheimer's disease.
PT
XX
XX Disclosure; Page 76; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
CC apoptosis. The protein can be used in the investigation, diagnosis and
CC treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 1 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Qy 2708 TAAAAA AAAAAAAAAAAAAAAAAAAAAA 2732
Db ||||||| AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 223
AAA39306/C
ID AAA39306 standard; RNA; 25 BP.
XX
XX AAA39306;
AC
XX
XX 11-SEP-2000 (first entry)
XX
XX Rapid capture probe designated Neu-probe SEQ ID NO:1.
XX
XX Rapid detection; probe; target nucleic acid; enzymatic amplification;
XX isolation; detection; ss.
XX
XX Synthetic.
OS
XX
XX US6060246-A.
XX
XX 09-MAY-2000.
XX
XX 13-NOV-1997; 97US-00969813.
XX
XX 15-NOV-1996; 96US-0030963P.
PR
XX
XX (AVIB-) AVI BIOPHARMA INC.
PA
XX
XX
XX
XX
XX Wages JM, Summerton JE, Weller DD;
PI
XX
XX WPI; 2000-364413/31.
XX
XX
XX Reagent for rapidly detecting or isolating target nucleic acid sequences
PT in polynucleotide-containing sample, comprises capture component and
PT target-specific probe linked to solid substrate.
XX
XX Example 3; Col 17; 24pp; English.
XX
XX The present invention describes a rapid pairing reagent (I) for the
CC isolation or detection of a polynucleotide (PN) analyte molecule having a
CC selected target base sequence, in a sample containing the analyte
CC molecule and non-target polynucleotide, comprising a capture component
CC (A) and a target-specific probe (B) linked to a solid substrate. The
CC isolated sequences are useful for enzymatic amplification. (I) is capable
CC of rapidly binding nucleic acids in the sample and placing them in close
CC proximity to target probes on the reagent, thus enabling binding under
CC low stringency. Combination of rapid capture and concentration of
CC polynucleotides with selective targeting of analyte molecules, greatly
CC enhances the isolation process. Non-ionic morpholino oligomers used as
CC probes are not extended by polymerases and therefore do not interfere
CC

```
CC with amplification of target molecule. AAA39306 to AAA39316 represent
CC oligonucleotides used in the exemplification of the present invention
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 0 T; 25 U; 0 Other;

Query Match          0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 224
AAZ30267/c
ID AAZ30267 standard; DNA; 25 BP.
XX
AC AAZ30267;
XX
11-FEB-2000 (first entry)
XX
Capture probe CP125 specific for c-myc fusion targets.
DE
c-myc fusion; non-nucleoside spacer; capture probe;
KW nucleic acid-protein fusion; ribosome display particle; ss.
XX
Synthetic.
XX
WO9951773-A1.
PN
14-OCT-1999.
XX
31-MAR-1999; 99WO-US007203.
XX
03-APR-1998; 98US-0080686P.
PR
(PHYL-) PHYLLOS INC.
XX
Kuimelis RG, Wagner R;
XX
WPI; 2000-013048/01.
DR
Attaching capture probes to solid phases through non-nucleic spacers,
PT producing arrays for detecting interactions of proteins with other
PT compounds, e.g. for drug screening.
XX
Example 8; Page 29; 57pp; English.
XX
The present sequence represents a capture probe specific for a c-myc
CC fusion target. It is used in the method of the invention. The
CC specification describes the use of non-nucleoside spacers to immobilise
CC an array of capture probes on a solid support. The solid support carries
CC an array of capture probes, each consisting of non-nucleoside spacers
CC plus an oligonucleotide to which a nucleic acid-protein fusion or a
CC ribosome display particle is bound. Non-nucleoside spacers prevent
CC interaction of proteins with the support surface, ensuring efficient
CC hybridisation between capture probes and bound nucleic acid/protein
CC fusions, while minimising denaturation of the protein which may then
CC adopt its native folded structure. The arrays of capture probes are used
CC to screen for interactions between proteins and compounds (e.g. other
CC proteins, ligands or nucleic acids), particularly to identify potential
CC therapeutic agents, enzyme substrates or unknown proteins that interact
CC with drugs, but also for diagnosis (detecting disease-associated
CC proteins) and for quantifying target molecules in a sample
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match          0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
```

```
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 225
ABK49986/c
ID ABK49986 standard; DNA; 25 BP.
XX
AC ABK49986;
XX
15-JUL-2002 (first entry)
XX
Example oligonucleotide #2 prepared on glass-synthetic resin membrane.
DE
Glass-synthetic resin membrane; pore glass-polytetrafluoroethylene resin;
KW chromatography membrane; PTFE; ss.
XX
Synthetic.
XX
US6261497-B1.
PN
17-JUL-2001.
XX
04-MAY-1999; 99US-00305219.
XX
21-FEB-1996; 96US-00604440.
PR
(CPGC-) CPG INC.
XX
Wong YN, Chen R;
XX
WPI; 2001-534961/59.
DR
Preparation of controlled pore glass-polytetrafluoroethylene resin
PT chromatography membrane by heating, calendaring and sintering mixture of
PT controlled pore glass and aqueous dispersion of polytetrafluoroethylene.
XX
Example 12; Col 8; 6pp; English.
XX
The invention relates to a method of preparing a controlled pore glass-
CC polytetrafluoroethylene (PTFE) resin chromatography membrane, comprising
CC combining controlled pore glass and an aqueous dispersion of PTFE to form
CC a paste-like mass, heating the paste-like mass at 50-70 plus or minus 10 degrees C,
CC calendaring to form a foldable sheet, and sintering the sheet to produce
CC a rigid, porous sheet. The method prepares a controlled pore glass-PTFE
CC resin chromatography membrane for use in various biotechnical procedures.
CC The membrane is useful in place of controlled pore glass as a support for
CC the synthesis, isolation, and purification of nucleic acids and for the
CC isolation and purification of proteins. The method produces a membrane
CC that may be used in lieu of controlled pore glass. The present sequence
CC represents an oligonucleotide prepared on the membrane in an example
CC which demonstrates the method of the invention
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match          0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 226
ADC54009/c
ID ADC54009 standard; DNA; 25 BP.
XX
AC ADC54009;
XX
18-DEC-2003 (first entry)
XX
Oligonucleotide of the invention SEQ ID NO:4.
DE
```



```

XX KW ss; probe carrier; discharge.
XX OS Synthetic.
XX PN JP2003035711-A.
XX XX
XX PD 07-FEB-2003.
XX XX
XX PF 28-MAR-2002; 2002JP-00093023.
XX XX
XX PR 28-MAR-2001; 2001JP-00094400.
XX XX
XX PA (CANO ) CANON KK.
XX DR WPI; 2003-535999/51.
XX XX
XX PT Probe carrier manufacturing method for inkjet system, involves scanning
XX PT liquid discharge head in direction orthogonal to scanning direction, at
XX PT angle satisfying predetermined relation.
XX PS Example 2; SEQ ID NO 4; 17pp; Japanese.
XX CC The invention relates to a novel probe carrier and the method for
XX CC manufacturing the carrier. The invention enables stable discharge of
XX CC liquid droplets adhering to discharge nozzle. The
XX CC present sequence is used in the exemplification of the invention.
XX KW Sequence 25 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX SQ
Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 227
ADCS4008
ID ADC54008 standard; DNA; 25 BP.
AC ADC54008;
XX XX
XX DT 18-DEC-2003 (first entry)
XX DE Oligonucleotide of the invention SEQ ID NO:3.
XX KW ss; probe carrier; discharge.
XX OS Synthetic.
XX PN JP2003035711-A.
XX XX
XX PD 07-FEB-2003.
XX PF 28-MAR-2002; 2002JP-00093023.
XX PR 28-MAR-2001; 2001JP-00094400.
XX XX
XX PA (CANO ) CANON KK.
XX DR WPI; 2003-535999/51.
XX XX
XX PT Probe carrier manufacturing method for inkjet system, involves scanning
XX PT liquid discharge head in direction orthogonal to scanning direction, at
XX PT angle satisfying predetermined relation.
XX PS Example 2; SEQ ID NO 3; 17pp; Japanese.
XX CC The invention relates to a novel probe carrier and the method for
XX CC manufacturing the carrier. The invention enables stable discharge of

```

```

CC solution, and removes liquid droplets adhering to discharge nozzle. The
CC present sequence is used in the exemplification of the invention.
XX KW Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX SQ
Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 1 AAAAAAAAAAAAAAAAAAAAAA 25

RESULT 228
ADF39737/C
ID ADF39737 standard; DNA; 25 BP.
XX XX
XX AC ADF39737;
XX DT 12-FEB-2004 (first entry)
XX DE Probe #4, immobilised on probe array using novel method.
XX KW Probe array; microarray; DNA array; DNA chip; manufacture; inkjet system;
XX KW electrostatic adsorption mechanism; DNA analysis;
XX KW simultaneous gene detection; probe; ss.
XX OS Synthetic.
XX PN JP2003014773-A.
XX XX
XX PD 15-JAN-2003.
XX PF 28-MAR-2002; 2002JP-00093024.
XX PR 28-MAR-2001; 2001JP-00094401.
XX XX
XX PA (CANO ) CANON KK.
XX DR WPI; 2003-496695/47.
XX XX
XX PT Manufacturing of probe carrier for carrying probes for base sequence
XX PT analysis of genetic deoxyribonucleic acid and simultaneous multiple item
XX PT diagnosis of gene by ink jet process while removing mist of probe
XX PT solution.
XX XX
XX PS Example 2; SEQ ID NO 4; 15pp; Japanese.
XX CC The invention relates to a method and device for the manufacture of a
XX CC probe array. The method involves using an inkjet system to discharge a
XX CC probe solution through a solution discharging head, so as to form a
XX CC number of probes on a solid matrix. Mists of the probe solution generated
XX CC during probe solution discharge are caught by an electrostatic adsorption
XX CC mechanism. The method and device are suitable for manufacturing probe
XX CC arrays for analysing DNA sequences, and for the simultaneous detection of
XX CC multiple genes. The method and device of the invention prevent the
XX CC scattering of probe positions and the mixing of different probe
XX CC solutions. The present sequence is related to the invention.
XX SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX XX
Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 229
ADF39736

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```

ID  ADF39736 standard; DNA; 25 BP.
XX  AC
XX  ADF39736;
XX  DT
XX  12-FEB-2004 (first entry)
XX  DE
XX  Target DNA sequence #3, capable of hybridising to probe #4.
XX  KW
XX  Probe array; microarray; DNA array; DNA chip; manufacture; inkjet system;
XX  KW
XX  electrostatic adsorption mechanism; DNA analysis;
XX  KW
XX  simultaneous gene detection; ss.
XX  OS
XX  Synthetic.
XX  PN
XX  JP2003014773-A.
XX  PD
XX  15-JAN-2003.
XX  PF
XX  28-MAR-2002; 2002JP-00093024.
XX  PR
XX  28-MAR-2001; 2001JP-00094401.
XX  PA
XX  (CANO ) CANON KK.
XX  DR
XX  WPI; 2003-496695/47.
XX  PT
XX  Manufacturing of probe carrier for carrying probes for base sequence
XX  PT
XX  analysis of genetic deoxyribonucleic acid and simultaneous multiple item
XX  PT
XX  diagnosis of gene by ink jet process while removing mist of probe
XX  PT
XX  solution.
XX  PS
XX  Example 2; SEQ ID NO 3; 15pp; Japanese.
XX  CC
XX  The invention relates to a method and device for the manufacture of a
XX  CC
XX  probe array. The method involves using an inkjet system to discharge a
XX  CC
XX  probe solution through a solution discharging head, so as to form a
XX  CC
XX  number of probes on a solid matrix. Mists of the probe solution generated
XX  CC
XX  during probe solution discharge are caught by an electrostatic adsorption
XX  CC
XX  mechanism. The method and device are suitable for manufacturing probe
XX  CC
XX  arrays for analysing DNA sequences, and for the simultaneous detection of
XX  CC
XX  multiple genes. The method and device of the invention prevent the
XX  CC
XX  scattering of probe positions and the mixing of different probe
XX  CC
XX  solutions. The present sequence is related to the invention.
XX  SQ
XX  Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db  1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 25

RESULT 230
AD081145/c
ID  AD081145 standard; DNA; 25 BP.
XX  AC
XX  AD081145;
XX  DT
XX  29-JUL-2004 (first entry)
XX  DE
XX  Prion protein polymorphic microsatellite marker consensus sequence #23.
XX  KW
XX  gene typing; polymorphic microsatellite loci; PML;
XX  KW
XX  disease predisposition; microsatellite marker; prion disease;
XX  KW
XX  cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX  KW
XX  milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
XX  KW
XX  microsatellite; ds.
XX  OS
XX  Synthetic.

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PN  DE10236711-A1.
XX  PD
XX  26-FEB-2004.
XX  PF
XX  09-AUG-2002; 2002DE-01036711.
XX  PR
XX  09-AUG-2002; 2002DE-01036711.
XX  PA
XX  (UYHO-) UNIV HOHENHEIM.
XX  PI
XX  Geldermann H, Preuss S, Han Y;
XX  DR
XX  WPI; 2004-215730/21.
XX  PT
XX  Typing genes that contain polymorphic microsatellite loci, useful for
XX  PT
XX  identifying predisposition to disease, by amplification and determining
XX  PT
XX  length of amplicons.
XX  PS
XX  Claim 9; Page 50; 64pp; German.
XX  CC
XX  The invention describes a method of typing (M1) a gene (I) that has one
XX  CC
XX  or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX  CC
XX  amplification of at least one DNA region of (I) that includes PML, using
XX  CC
XX  as template a DNA sample containing at least one segment of (I); and
XX  CC
XX  determining the length of the resulting amplicon(s). Also described are:
XX  CC
XX  a method of determining (M2) microsatellite markers (MM) for
XX  CC
XX  predisposition to a disease, associated with a gene that includes one or
XX  CC
XX  more PML; and prediagnosis (M3) of diseases associated with gene that
XX  CC
XX  include PML. The method is used to identify microsatellite markers, in a
XX  CC
XX  disease-related gene, that are associated with a predisposition to
XX  CC
XX  diseases and for prediagnosis of such diseases, especially prion diseases
XX  CC
XX  but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX  CC
XX  metabolic diseases; also to type genes that encode milk proteins,
XX  CC
XX  hormones or transcription factors. The method is simpler, quicker and
XX  CC
XX  particularly less expensive than known methods based on sequencing. This
XX  CC
XX  sequence represents a prion protein polymorphic microsatellite marker
XX  CC
XX  consensus sequence.
XX  SQ
XX  Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match      0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db  25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 231
ADV86469/c
ID  ADV86469 standard; DNA; 25 BP.
XX  AC
XX  ADV86469;
XX  DT
XX  24-MAR-2005 (first entry)
XX  DE
XX  Fluorophore-labeled biological detection oligonucleotide #2.
XX  KW
XX  fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX  OS
XX  Synthetic.
XX  PN
XX  US6838244-B1.
XX  PD
XX  04-JAN-2005.
XX  PF
XX  18-MAY-2001; 2001US-00859736.
XX  PR
XX  19-MAY-2000; 2000US-0205452P.
XX  PA
XX  (MONS ) MONSANTO TECHNOLOGY LLC.
XX  XX

```

PI Li WR, Zhou JS;
XX
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
PT for detecting biological molecules e.g., antibody, antigen, avidin or
PT protein.
XX
XX Example 1; SEQ ID NO 2; 18pp; English.
PS
XX The invention relates to an oligonucleotide molecule (ON) labeled with
CC several fluorophores of one or more types embedded in its backbone, where
CC one or more of the fluorophores is not located at either the 3' or 5'
CC terminus of ON. ON is useful for sequencing nucleic molecules. ON is
CC useful for detecting biological molecules e.g., antibody, antigen,
CC avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is
CC capable of providing strong fluorescence signals at different
CC wavelengths. This sequence corresponds to an example of an
CC oligonucleotide of the invention.
XX
XX Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 232
ADV86468/c
ID ID ADV86468 standard; DNA; 25 BP.
XX
XX AC ADV86468;
XX
XX 24-MAR-2005 (first entry)
XX Fluorophore-labeled biological detection oligonucleotide #1.
XX fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX Synthetic.
XX OS
XX XX US6838244-B1.
XX XX
XX XX 04-JAN-2005.
XX XX
XX XX 18-MAY-2001; 2001US-00859736.
XX XX
XX XX 19-MAY-2000; 2000US-0205452P.
XX XX
XX XX (MONS) MONSANTO TECHNOLOGY LLC.
XX XX
XX Li WR, Zhou JS;
XX
XX WPI; 2005-063191/07.
XX

Novel oligonucleotide molecule labeled with several fluorophores, useful
PT for detecting biological molecules e.g., antibody, antigen, avidin or
PT protein.
XX
XX Example 1; SEQ ID NO 1; 18pp; English.
PS
XX The invention relates to an oligonucleotide molecule (ON) labeled with
CC several fluorophores of one or more types embedded in its backbone, where
CC one or more of the fluorophores is not located at either the 3' or 5'
CC terminus of ON. ON is useful for sequencing nucleic molecules. ON is
CC useful for detecting biological molecules e.g., antibody, antigen,
CC avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is
CC capable of providing strong fluorescence signals at different
CC wavelengths. This sequence corresponds to an example of an
CC oligonucleotide of the invention.
XX
XX Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ

```

CC oligonucleotide of the invention.
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches .25; Conservative 0; Mismatches 0; Indels 0; Gaps

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
   |||||||
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 233
AEB26392/c
ID AEB26392 standard; DNA; 25 BP.
XX
AC AEB26392;
XX
DT DT
XX
XX 22-SEP-2005 (first entry)
XX
DE DNA hybridization probe, SEQ ID NO:4.
XX
KW DNA microarray; biochip; immobilization; probe; ss.
XX
OS Synthetic.
XX
OS
XX
FH Key Location/Qualifiers
FT misc_binding 1..25
FT /*tag= b
FT /bound_moiety= "Bases 25-1 of target SEQ ID NO:3"
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Optionally conjugated via 5' phosphate to (CH2)6 linker"
XX
PN US2005158738-A1.
XX
XX
XX 21-JUL-2005.
XX
XX 06-OCT-2004; 2004US-00958348.
XX
XX 27-APR-2001; 2001JP-00133697.
XX
XX 27-APR-2001; 2001JP-00133698.
XX
XX 29-APR-2002; 2002US-00133675.
XX
XX (CANO ) CANON KK.
XX
XX
XX Okamura N, Okamoto T, Kameyama M;
XX
XX WPI; 2005-532125/54.
XX
XX Manufacture of probe carrier for analyzing gene deoxyribonucleic acid
sequence, involves forming labeled indexes on carrier at specific
positions, and applying solutions respectively containing probes to
respective specific positions.
XX
XX
XX Example 2; SEQ ID NO 4; 24pp; English.
XX
XX The invention relates to a method for the manufacture of a DNA probe
array comprising probes of a plurality of species fixed at respective
different positions on the substrate. The method involves forming labeled
indexes on the substrate at specific positions, and applying probe-
containing solutions to these specific positions. Preferably, the method
further comprises forming a dividing wall (especially by photolithography
methods) for partitioning the specific positions on the substrate,
irradiating the substrate with plasma in a gas atmosphere containing
fluorine, and removing ingredients of the gas adhering to the specific
positions. The invention also relates to a method of identifying the
position of a target substance bonded to the probe on such a substrate by
utilizing the indexes. The probe array is used for analyzing gene
sequences or for conducting multiple genetic diagnoses. The inventive

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Best Local Similarity 100.0%; Pred. No. 3.7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 25; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 236
AAX78723/c
ID AAX78723 standard; DNA; 26 BP.
AC AAX78723;
XX
DT 03-SEP-1999 (first entry)
DE Human pancreatic PA153 EST-specific clone primer 12.
KW Pancreatic disease; PA153; human; cytostatic; detection; antigen;
KW anti-PA153; antagonist; therapy; treatment; tumour; metastasis;
KW gene therapy; EST; expressed sequence tag; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FN WO9931274-A2.
XX
PD 24-JUN-1999.
XX
PF 11-DEC-1998; 98WO-US026441.
XX
PR 15-DEC-1997; 97US-00990568.
XX
PA (ABBO ) ABBOTT LAB.
XX
PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;
PI Granados EN, Hodges SC, Klass MR, Kratochvil JD, Roberts-Rapp L;
PI Russell JC, Stroupe SD;
XX
DR WPI; 1999-405041/34.
XX
PT PA153 cDNA transcribed from pancreatic tissue.
XX
PS Example 2; Page 121; 123pp; English.
XX
CC This invention describes novel contiguous and partially overlapping cDNA
CC sequences and their encoded polypeptides, designated PA153, transcribed
CC from human pancreatic tissue and which have cytostatic activity. The
CC PA153 polynucleotides, proteins and antibodies are all useful in methods
CC of detection. Detection of PA153 polynucleotide, antigens or anti-PA153
CC antibodies in a sample is indicative of pancreatic disease. PA153
CC antibodies (antagonists) can also be used in vivo for therapeutic use,
CC e.g. treatment of pancreatic disease, tumours or metastases. Antisense
CC PA153 polynucleotides can be used in gene therapy of pancreatic diseases.
CC AAX78712-X78725 represent primers used in the method of the invention
XX
SQ Sequence 26 BP; 0 A; 0 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 237
AAI73048/c
ID AAI73048 standard; DNA; 26 BP.
XX
AC AAI73048;
XX
SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 238
AAS20672/c
ID AAS20672 standard; DNA; 26 BP.
XX
AC AAS20672;
XX
DT 09-APR-2002 (first entry)
DE Human zalphall Ligand sequencing primer ZC7764b.
XX
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
FN US6307024-B1.

```

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DT 24-OCT-2002 (first entry)
XX Scaffold oligonucleotide.
DE
XX
KW Molecular scaffold; fluorophore; fluorescence; energy transfer;
KW emission wavelength; excitation wavelength; multiple; single nucleotide;
KW polymorphism; ss.
XX
OS Synthetic.
XX
PN WO200222883-A1.
XX
PD 21-MAR-2002.
XX
PF 11-SEP-2001; 2001WO-US028967.
XX
PR 11-SEP-2000; 2000US-00658077.
XX
PR 31-JUL-2001; 2001US-0309156P.
XX
PA (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI Ju J, Li Z, Tong A, Russo JJ;
XX
DR WPI; 2002-575158/61.
XX
PT Composition of matter useful for multi-component analyses, comprises
PT multiple fluorophores bound to molecular scaffold at preset positions to
PT permit fluorescence energy transfer between two fluorophores.
XX
PS Disclosure; Page 43; 113pp; English.
XX
CC This sequence represents a molecular scaffold which may be used in a
CC composition of matter comprising multiple fluorophores. The fluorophores
CC are bound to the molecular scaffold at separate predetermined positions,
CC to permit fluorescence energy transfer between two fluorophores. The
CC fluorophores are characterized by maximum emission wavelength of one
CC being greater than the minimum excitation wavelength of the other. The
CC composition is useful for determining whether a preselected nucleotide
CC residue is present at a predetermined position within a nucleic acid. It
CC is also useful in multicomponent analysis including multiplex biological
CC analysis, and identifying multiple single nucleotide polymorphisms. The
CC presence of a number of given nucleotide residues is determined
CC simultaneously by the composition of the invention
XX
SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 238
AAS20672/c
ID AAS20672 standard; DNA; 26 BP.
XX
AC AAS20672;
XX
DT 09-APR-2002 (first entry)
DE Human zalphall Ligand sequencing primer ZC7764b.
XX
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
FN US6307024-B1.

```

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XX PD 23-OCT-2001.
XX PF
XX PR 09-MAR-2000; 2000US-00522217.
XX PR 09-MAR-1999; 99US-0123547P.
XX PR 11-MAR-1999; 99US-0123904P.
XX PR 01-JUL-1999; 99US-0142013P.
XX PA (ZYMO ) ZYMOGENETICS INC.
XX PI Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX WPI; 2002-040208/05.
XX
XX New zalphall ligand polypeptides and polynucleotides, useful for
XX PT stimulating proliferation, activation, differentiation and/or induction
XX PT of inhibition of specialized cell function, or for stimulating an
XX PT antigenic response.
XX
XX Example 7; Col 139; 105pp; English.
XX
XX The present invention relates to the isolation of a novel cytokine,
XX CC zalphall Ligand and the polynucleotide encoding it. The invention also
XX CC gives the sequence for the zalphall receptor and the polynucleotide
XX CC encoding it. The zalphall Ligand polypeptide stimulates proliferation of
XX CC natural killer (NK) cells or NK cell progenitors, the activation of NK
XX CC cells, proliferation of T-cells, proliferation of B-cells stimulated with
XX CC anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
XX CC reduces proliferation of B-cells stimulated with anti-IgM antibodies. The
XX CC zalphall Ligand polypeptide is also useful in preparing antibodies that
XX CC bind to zalphall Ligand epitopes. The zalphall Ligand polynucleotides can
XX CC be used as probes or primers to clone regions of a zalphall Ligand gene,
XX CC and in gene therapy. Zalphall Ligand may also be used to identify
XX CC inhibitors of its activity, to enhance the generation of anti-tumour
XX CC responses with or without the infusion of donor lymphocytes, and to
XX CC activate or stimulate the immune system. The present sequence represents
XX CC a sequencing primer used to sequence cDNA clones in the isolation of
XX CC human zalphall Ligand
XX
XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 239
ABX93461/c
ID ABX93461 standard; DNA; 26 BP.
XX
AC ABX93461;
XX
XX 27-MAY-2003 (first entry)
XX
DE LS147-specific polynucleotide sequencing related universal primer #1.
XX
XX LS147; cancer; lung cancer; gene therapy; cytostatic; ss; sequencing;
XX KW primer; EST clone; expressed sequence tag clone.
XX
XX Synthetic.
XX
XX US2002188114-A1.
XX
XX 12-DEC-2002.
XX
XX 05-JUN-1998; 98US-00092296.
XX

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PR 05-JUN-1997; 97US-0048810P.
XX
XX (BILL/) BILLINGEL P.
XX PA (COHE/) COHEN M.
XX PA (COLP/) COLPITTS T L.
XX PA (FRIE/) FRIEDMAN P N.
XX PA (KLAS/) KLASS M R.
XX PA (RUS/) RUSSELL J C.
XX PA (STRO/) STROUPE S.
XX
XX Billengel P, Cohen M, Colpitts TL, Friedman PN, Klasse MR;
XX PI Russell JC, Stroupe S;
XX WPI; 2003-341045/32.
XX
XX New LS147 polypeptide, useful for preparing a composition for treating
XX PT e.g., lung cancer.
XX
XX Example 2; Page 39; 47pp; English.
XX
XX The invention describes a purified polypeptide or its fragment derived
XX CC from the LS147 gene capable of selectively hybridizing to the nucleic
XX CC acid of the gene and has at least 50% identity with the polynucleotide.
XX CC The LS147 polypeptide is useful for preparing a composition for treating
XX CC cancer, e.g. lung cancer using gene therapy. This sequence represents a
XX CC universal primer used to sequence LS147 expressed sequence tag (EST)-
XX CC clones
XX
XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 240
ADH44609/c
ID ADH44609 standard; DNA; 26 BP.
XX
AC ADH44609;
XX
XX 25-MAR-2004 (first entry)
XX
DE Human cDNA encoding Zalphall sequencing primer #3.
XX
XX Human; ss; Zalphall ligand; Zalphall receptor; immune response;
XX KW tumour progression; metastasis; tumour stasis; haematopoietic tumour;
XX KW lymphoma; B cell tumour; systemic lupus erythematosus;
XX KW rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
XX KW immunocompromised patient; HIV infection; vaccine; primer.
XX
XX Homo sapiens.
XX
XX US6605272-B2.
XX
XX 12-AUG-2003.
XX
XX 03-AUG-2001; 2001US-00923246.
XX
XX 09-MAR-1999; 99US-0123547P.
XX PR 11-MAR-1999; 99US-0123904P.
XX PR 01-JUL-1999; 99US-0142013P.
XX PR 09-MAR-2000; 2000US-00522217.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX

```

DR WPI; 2003-895283/82.

XX Stimulating an immune response in a mammal exposed to an antigen or

PT pathogen, useful for enhancing anti-tumor activity resulting in reduced

PT tumor progression or metastasis, comprises administering zalphall ligand

PT polypeptide.

XX

XX Example 7; SEQ ID NO 39; 103pp; English.

XX

XX The invention relates to stimulating an immune response in a mammal

XX exposed to an antigen or pathogen comprising administering a composition

XX comprising mature zalphall ligand polypeptide comprising residues 32-162

XX of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an

XX immune response in a mammal exposed to an antigen or pathogen

XX (comprising: (a) determining (indirectly) the level of antigen or

XX pathogen present in the mammal; (b) administering a composition

XX comprising zalphall ligand polypeptide in a pharmaceutical vehicle; (c)

XX determining (indirectly) the level of antigen or pathogen in the mammal;

XX and (d) comparing the antigen or pathogen level in (a) with (b), where a

XX change in the level indicates stimulation of immune response), and

XX stimulating an immune response in a mammal exposed to an antigen or

XX pathogen (comprising: (a) determining a level of antigen- or pathogen-

XX specific antibody; (b) administering a composition comprising zalphall

XX ligand polypeptide in a pharmaceutical vehicle; (c) determining a post

XX administration level of the antigen- or pathogen-specific antibody; and

XX (d) comparing the level of the antibody in (a) with (b), where an

XX increase in the level indicates stimulation of immune response).

XX The method is useful for stimulating an immune response in a mammal

XX exposed to an antigen or pathogen, and for enhancing anti-tumor activity

XX resulting in a reduction in tumor progression, decrease in metastasis,

XX or tumor stasis. The tumor may be a haematopoietic tumour, a lymphoma

XX or a B cell tumour. The zalphall ligand is useful for treating a wide

XX range of diseases arising from defects in the immune system, e.g.

XX systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or

XX diabetes, for boosting immunity to infectious diseases, treating

XX immunocompromised patients, such as HIV+ patients and in improving

XX vaccines. The present sequence is a sequencing primer used in the

XX exemplification of the invention.

XX

SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733

DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 241

AD100945/c

ID AD100945 standard; DNA; 26 BP.

XX

XX AD100945;

XX

XX 22-APR-2004 (first entry)

XX

XX Sequencing primer SEQ 39 used to analyse human zalphall ligand clone DNA.

XX

XX zalphall ligand; immunity; infectious disease; immunocompromised patient;

XX HIV; vaccine; human; ss; PCR; primer.

XX

XX Homo sapiens.

XX

XX US2003125524-A1.

XX

XX 03-JUL-2003.

XX

XX 15-NOV-2002; 2002US-00295723.

XX

XX 09-MAR-2000; 2000US-00522217.

XX

PA (ZYMO) ZYMOGENETICS INC.

XX

PI Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

XX

XX WPI; 2003-811003/76.

XX

XX New zalphall ligand polypeptides, useful for boosting immunity to

XX infectious diseases, and treating immunocompromised patients, such as

XX human immunodeficiency virus (HIV) patients, or in improving vaccines.

XX

XX Example 7; SEQ ID NO 39; 113pp; English.

XX

XX The invention relates to a novel isolated zalphall ligand polypeptide.

XX The polypeptide of the invention may be useful for boosting immunity to

XX infectious diseases and treating immunocompromised patients, such as HIV

XX patients, as well as in improving vaccines. The current sequence is that

XX of the PCR primer which was used in the exemplification of the invention.

XX

SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733

DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 242

ADP19768/c

ID ADP19768 standard; DNA; 26 BP.

XX

XX ADP19768;

XX

XX 26-AUG-2004 (first entry)

XX

XX Human zalphall ligand PCR primer seqid 39.

XX

XX cytostatic; zalphall ligand; pharmaceutical; cancer; immune response;

XX melanoma; tumour; solid tumour; haematopoietic tumour; lymphoma; human;

XX PCR; primer; ss.

XX

XX Homo sapiens.

XX

XX US2004110932-A1.

XX

XX 10-JUN-2004.

XX

XX 10-SEP-2003; 2003US-00659684.

XX

XX 09-MAR-1999; 99US-0123547P.

XX

XX 11-MAR-1999; 99US-0123904P.

XX

XX 01-JUL-1999; 99US-0142013P.

XX

XX 09-MAR-2000; 2000US-00522217.

XX

XX (ZYMO) ZYMOGENETICS INC.

XX

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

XX Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

XX

XX WPI; 2004-440401/41.

XX

XX New zalphall ligand polynucleotide and polypeptide molecules, useful for

XX treating cancer, e.g. melanoma, solid tumor, hematopoietic tumor, or

XX lymphoma.

XX

XX Example 7; SEQ ID NO 39; 111pp; English.

XX

XX The invention describes an isolated polypeptide comprising a sequence of

XX amino acid residues that is at least 90 or 95% identical to residues 41

XX (Gln) to 148 (Ile), or 32 (Gln) to 148 (Ile) of a sequence of 162 amino

XX

CC acids (SEQ ID NO:2, human zalphall ligand), fully defined in the
 CC specification. Also described are: a pharmaceutical composition
 CC comprising the polypeptide, and a vehicle; a method of treating cancer in
 CC a mammal; a method of stimulating an immune response in a mammal with
 CC melanoma; a method of stimulating an immune response in a mammal bearing
 CC a tumour; an isolated polynucleotide comprising a sequence of nucleotides
 CC that encode amino acid residues cited above, where the polynucleotide
 CC encodes a polypeptide that binds a receptor comprising 538 amino acids,
 CC fully defined in the specification; a pharmaceutical composition
 CC comprising the polynucleotide encoding, in a pharmaceutically acceptable
 CC vehicle, an expression vector comprising the following operably linked
 CC elements a control element; and a DNA segment comprising the
 CC polynucleotide; and an isolated polynucleotide molecule comprising at
 CC least 10 nucleotides of the polynucleotide sequence of 642 bp, fully
 CC defined in the specification. The molecules, compositions and methods are
 CC useful for treating cancer, e.g. melanoma, solid tumour, haematopoietic
 CC tumour, or lymphoma. This sequence represents a primer used in the
 CC expression cloning of human cytokine zalphall ligand.
 XX
 SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 243
 ADV96392/c
 ID ADV96392 standard; DNA; 26 BP.
 XX
 AC ADV96392;
 XX
 DT 10-MAR-2005 (first entry)
 XX
 DE Human zalphall ligand-specific PCR primer - SEQ ID 39.
 XX
 KW stem cell; cell culture; PCR; primer; ss; zalphall ligand.
 XX
 OS Homo sapiens.
 XX
 PN US2004260065-A1.
 XX
 PD 23-DEC-2004.
 XX
 PF 26-FEB-2004; 2004US-00787442.
 XX
 PR 09-MAR-1999; 99US-0123547P.
 PR 11-MAR-1999; 99US-0123904P.
 PR 01-JUL-1999; 99US-0142013P.
 PR 09-MAR-2000; 2000US-00522217.
 XX
 PA (NOVA/) NOVAK J E.
 PA (PRES/) PRESNELL S R.
 PA (SPRE/) SPRECHER C A.
 PA (FOST/) FOSTER D C.
 PA (HOLLY/) HOLLY R D.
 PA (GROSS/) GROSS J A.
 PA (JOHN/) JOHNSTON J V.
 PA (NELS/) NELSON A J.
 PA (DILL/) DILLON S R.
 PA (HAMM/) HAMMOND A K.

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
 PI Gross JA, Johnston JV, Nelson AJ, Dillion SR, Hammond AK;
 XX WPI; 2005-038783/04.

XX New zalphall 11 Ligand fusion protein, useful for stimulating the
 XX proliferation and/or development of hematopoietic cells in vitro and in
 PT

PT vivo, and in autologous marrow culture.
 XX
 PS Example 7; SEQ ID NO 39; 110pp; English.
 XX
 CC The invention comprises a fusion protein that contains a zalphall ligand
 CC and a cytokine polypeptide (e.g. IL-2, IL-4, IL-15 or GM-CSF), the fusion
 CC protein of the invention binds to the human receptor protein. The protein
 CC of the invention is useful for stimulating the proliferation and/or
 CC development of hematopoietic cells. The protein of the invention is also
 CC useful in autologous marrow culture. The present DNA sequence represents
 CC a PCR primer that was used in an example of the invention.

XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 244
 ADM14179/c
 ID ADM14179 standard; DNA; 26 BP.

XX
 AC ADM14179;
 XX
 DT 07-APR-2005 (first entry)
 XX
 DE Universal primer SEQ ID 10.
 XX
 KW Sequencing; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US2005019820-A1.
 XX
 PD 27-JAN-2005.

XX 25-AUG-2004; 2004US-00925448.
 XX
 PR 05-JUN-1997; 97US-0048810P.
 PR 05-JUN-1998; 98US-00092296.

XX (BILL/) BILLING-MEDEL P A.
 PA (COHE/) COHEN M.
 PA (COLP/) COLPITTS T L.
 PA (FRIE/) FRIEDMAN P N.
 PA (KLAS/) KLAS M R.
 PA (RUSSE/) RUSSELL J C.
 PA (STRO/) STROUPE S D.

XX Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, KLAS MR;
 PI Russell JC, Stroupe SD;
 XX WPI; 2005-121297/13.

XX New polynucleotide encoding LSI47 polypeptide, useful for detecting,
 PT diagnosing, staging, preventing or treating lung diseases, e.g. lung
 PT cancer, pneumonia, asthma, or adult respiratory distress syndrome.

XX Example 2; SEQ ID NO 10; 47pp; English.

XX The present invention relates to novel purified polynucleotides (I;
 CC ADM14170-ADM14176) and proteins (ADM14184-ADM14187) derived from lung
 CC tissue gene LSI47. The sequences are useful for detecting, diagnosing,
 CC staging, monitoring, prognosticating, in vivo imaging, preventing or
 CC treating diseases of the lung, e.g. lung cancer, pneumonia (of all
 CC origins including viral, bacterial, and fungal), asthma, black lung
 CC disease, or adult respiratory distress syndrome. Recombinant constructs
 CC comprising (I) can be produced using, e.g. plasmid pINCY, which contains

CC universal priming sites adjacent to the 3' and 5' ligation junctions of
 CC the inserts. The present sequence is a universal primer used to sequence
 CC the LSI47 inserts cloned in pINCY.

XX SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
 DB 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 245
 AEC01876
 ID AEC01876 standard; DNA; 26 BP.

XX AC AEC01876;
 XX DT 20-OCT-2005 (first entry)
 XX DE Nucleotide sequence of leader sequence #1 of 5'-UTR.

XX leader sequence; mRNA translation; cell-free system; protein production;
 KW ss.
 XX Synthetic.

XX PN WO2005075644-A2.

XX PD 18-AUG-2005.

XX PF 04-FEB-2005; 2005WO-EP001146.

XX PR 06-FEB-2004; 2004RU-00103495.

XX PA (HOFF) ROCHE DIAGNOSTICS GMBH.

XX PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

XX PA (PROT=) INST PROTEIN RES.

XX PI Gudkov AT, Ozerova MV, Shiryayev VM, Spirin A;

XX WPI; 2005-555940/56.

XX New leader sequence containing a poly(A) sequence from 5A to 35A or
 PT containing an additional sequence linked to the complete or deleted
 PT construct of poly(A) sequence, useful for synthesizing polypeptides in a
 PT cell-free system.

XX Claim 2; SEQ ID NO 1; 26pp; English.

XX The specification describes a leader sequence that enhances mRNA
 CC translation in a cell-free system. The leader sequence contains a poly(A)
 CC sequence from 5A to 35A, an additional sequence linked to the complete or
 CC deleted construct of poly(A) sequence, or at least one nucleotide
 CC substitution either in the complete or deleted poly(A) sequence. The
 CC leader sequence is inserted in a 5'-untranslated region (5'-UTR) adjacent
 CC to the site of initiation of translation. Leader sequences of the
 CC invention are useful for synthesizing polypeptides in a cell-free system.
 CC The present sequence represents a leader sequence of the invention,
 CC comprising 25 adenosine nucleotides.

XX SQ Sequence 26 BP; 25 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
 DB 2 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 246
 AAV71936/C

XX ID AAV71936 standard; DNA; 27 BP.

XX AC AAV71936;

XX DT 18-FEB-1999 (first entry)

XX DE Anchored poly T RT-PCR primer.

XX Normalised; cDNA library; mRNA cloning; reverse transcription;
 KW immobilise; screening; hybridisation; nucleic acid amplification;
 KW expression pattern; drug development; PCR primer; RT-PCR; ss.

XX OS Synthetic.

XX PN WO9851789-A2.

XX PD 19-NOV-1998.

XX PF 13-MAY-1998; 98WO-DK000186.

XX PR 13-MAY-1997; 97DK-00000547.

XX PR 19-MAY-1997; 97US-00871030.

XX PR 27-MAR-1998; 98DK-00000432.

XX PA (DISP-) DISPLAY SYSTEMS BIOTECH APS.

XX PI Warthoe PR;

XX WPI; 1999-009772/01.

XX Preparation of normalised, subdivided cDNA libraries from mRNA - by
 PT reverse transcription and amplification, used to screen for new genes and
 PT interacting proteins, potential drugs, and for diagnosis.

XX Example 1; Page 29; 71pp; English.

XX The invention relates to preparation of a normalised, subdivided library
 CC of amplified cDNA from the coding regions of mRNA in a sample. The method
 CC involves reverse transcription, with at least one cDNA primer of formula
 CC 5'-Con1-dTn2-Vn3-Nn4 to form first stand cDNA where Con1 = any sequence
 CC of 1-100 nucleotides; dT = deoxythymidyl; n2 is at least 1; n3 and n4
 CC are both 0, or n3 is 1 and n4 is at least 1; followed by second strand
 CC cDNA synthesis using the first strand as template and a second cDNA
 CC primer of a similar formula, in the presence of DNA polymerase I (or its
 CC Klenow fragment) and amplification of double-stranded cDNA with a set of
 CC amplification primers. Comparison of cDNA in the prepared library with a
 CC database (a computer-generated list of molecular weights of restricted
 CC DNA fragments of known sequence) is used to determine presence of an
 CC expressed protein in a cell, also to detect changes in such expression
 CC (particularly for diagnosis of disease). Surfaces (chip) having amplified
 CC cDNA stably immobilised on it, obtained by a similar method, are used to
 CC screen for genes of a particular family, by hybridisation with nucleic
 CC acid from the family (to identify new genes) and to detect differences in
 CC expression patterns between cells. The polypeptides expressed by the
 CC libraries can be used for drug development. Sequences AAV71935 to
 CC AAV71946 represent primers used to exemplify the method of the invention

XX SQ Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
 DB 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 247

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ABS53863/c
ID ABS53863 standard; DNA; 27 BP.
XX
AC ABS53863;
XX
DT 25-NOV-2002 (first entry)
XX
DE Human androgen receptor complex-associated protein 5'RACE PCR primer #1.
XX
KW Human; androgen receptor complex-associated protein; ARCAP; primer; ss;
KW androgen receptor; AR; cancer; liver tumour; cytostatic; PCR; 5'RACE.
XX
OS Homo sapiens.
XX
PN EP127150-A2.
XX
PD 31-JUL-2002.
XX
PF 16-JAN-2002; 2002EP-00250305.
XX
PR 17-JAN-2001; 2001US-0262312P.
PR 12-FEB-2001; 2001US-00781693.
XX
PA (VETE-) VETERANS GEN HOSPITAL.
XX
PI Tai-Jay C;
XX
DR WPI; 2002-676576/73.
XX
PT Novel substantially pure androgen receptor (AR) complex-associated
PT protein which binds to AR and increases ability of AR to transactivate
PT androgen-responsive gene, useful as drug target for treating liver
PT cancer.
XX
PS Example; Page 11; 26pp; English.
XX
CC The invention relates to an androgen receptor complex-associated protein
CC (ARCAP) sequence and the cDNA encoding it. The protein is useful for
CC screening a compound that decreases AR-mediated (androgen receptor
CC mediated) transactivation which involves contacting the ARCAP protein
CC with a protein complex comprising an AR in the presence of a candidate
CC compound, measuring the extent of binding between the polypeptide, and
CC determining if the extent of binding is less than the extent of binding
CC between the polypeptide and the protein complex in the absence of the
CC candidate compound. The ARCAP DNA is useful for determining if a sample
CC contains cancerous cells which involves providing a sample from a human
CC patient and detecting ARCAP expression in the sample. The sequences are
CC useful for determining whether a sample contains liver tumour cells. This
CC sequence represents a 5'RACE PCR primer used to amplify human ARCAP DNA
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;

Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 248
ABS54324/c
ID ABS54324 standard; DNA; 27 BP.
XX
AC ABS54324;
XX
DT 10-DEC-2002 (first entry)
XX
DE Human ARCAP associated 5'RACE PCR primer.
XX
KW Human; androgen receptor complex-coupled protein; ARCAP; PCR; primer; ss.
XX

```

```

OS Homo sapiens.
XX
PN JP2002262871-A.
XX
PD 17-SEP-2002.
XX
PF 28-FEB-2001; 2001JP-00055192.
XX
PR 12-FEB-2001; 2001US-00781693.
XX
PA (VETE-) VETERANS GEN HOSPITAL.
XX
PI Tai-Jay C;
XX
DR WPI; 2002-676576/73.
XX
PT Novel substantially pure androgen receptor (AR) complex-associated
PT protein which binds to AR and increases ability of AR to transactivate
PT androgen-responsive gene, useful as drug target for treating liver
PT cancer.
XX
PS Example; Page 15; 18pp; Japanese.
XX
CC The present invention relates to the isolation of human androgen receptor
CC complex-coupled protein (ARCAP), and the polynucleotide sequence encoding
CC it. The ARCAP polypeptide complexes with an androgen receptor to increase
CC the activity of the androgen receptor, transactivating the androgen
CC responding gene. The invention also describes a vector containing the
CC ARCAP polynucleotide sequence, and a host cell containing the ARCAP
CC polynucleotide sequence. The ARCAP polypeptide can be used as a treating
CC agent. The present sequence represents a PCR primer used in the example
CC of the present invention
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;

Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 249
ADG75349/c
ID ADG75349 standard; DNA; 27 BP.
XX
AC ADG75349;
XX
DT 11-MAR-2004 (first entry)
XX
DE RT-PCR primer oligo dT used to amplify KDR-related RNA.
XX
KW multivalent compound; binding group; cytostatic; antitumetic;
KW antiarthritic; antipsoriatic; antidiabetic; ophthalmological;
KW antiarteriosclerotic; antiulcer; vasotropic;
KW receptor tyrosine kinase inhibitor; angiogenesis; hyperproliferation;
KW tumour; rheumatoid arthritis; psoriasis; diabetic retinopathy;
KW atherosclerosis; ulcer; restenosis; contraceptive;
KW uterine neovascularisation; KDR; kinase domain region; ss; PCR; primer;
KW RT-PCR.
XX
OS Unidentified.
XX
PN WO2003084574-A1.
XX
PD 16-OCT-2003.
XX
PF 03-MAR-2003; 2003WO-US006656.
XX
PR 01-MAR-2002; 2002US-0360821P.
PR 15-JAN-2003; 2003US-0440201P.
PR

```

```

XX (BRAC ) BRACCO INT BV.
PA (DYAX-) DYAX CORP.
XX
XX Arbogast C, Bussat P, Dransfield DT, Fan H, Linder K;
PI Marinelli ER, Nanjappan P, Nunn A, Pillai R, Pochon S, Ramalingam K;
PI Sato A, Shrivastava A, Song B, Swenson RE, Von Wronski MA;
PI Walker SM;
XX
XX WPI; 2004-053022/05.
DR
XX
XX New compound with two different binding groups for same target, useful as
PT diagnostic and therapeutic agent, e.g. for tumors and other angiogenic
PT diseases.
XX
XX Example 6; Page 119; 278pp; English.
XX
XX The invention relates to a novel multivalent compound comprising two
CC binding groups specific for different binding sites on the same target.
CC The compound of the invention demonstrates cytostatic, antirheumatic,
CC antiarthritic, antipsoriatic, antidiabetic, ophthalmological,
CC antiarteriosclerotic, antitumor and vasotropic activities and may act as
CC an inhibitor of receptor tyrosine kinase activity. The compound may be
CC used to prepare diagnostic imaging agents and pharmaceutical compositions
CC for treating diseases associated with angiogenesis or hyperproliferation,
CC particularly tumors, but also rheumatoid arthritis, psoriasis, diabetic
CC retinopathy, atherosclerosis, ulcers and restenosis. Furthermore, the
CC compound may be utilised as a contraceptive via inhibition of uterine
CC neovascularisation. The current sequence is that of the RT-PCR primer
CC oligo dt of the invention which was used to amplify KDR (kinase domain
CC region)-related RNA.
XX
XX Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 250
ADR51048/c
ID ADR51048 standard; DNA; 27 BP.
XX
AC ADR51048;
XX
XX 21-OCT-2004 (first entry)
XX
XX Duo binding moiety multivalent compound associated primer #1.
DE
DE ss; primer; antiarthritic; cytostatic; ophthalmological;
KW angiogenesis inhibitor; Kdr tyrosine kinase inhibitor; VEGF antagonist;
KW hepatocyte growth factor antagonist; multivalent compound;
KW binding moiety; euplastic tumour growth; angiogenesis;
KW hyperproliferation; arthritis; atherosclerotic plaque;
KW corneal graft neovascularization; ocular disease.
XX
XX Synthetic.
OS
XX
XX WO2004064595-A2.
PN
XX
XX 05-AUG-2004.
PD
XX
XX 11-SEP-2003; 2003WO-US028838.
PF
XX
XX 15-JAN-2003; 2003US-0440201P.
PR
XX
XX 03-MAR-2003; 2003US-00379287.
XX
XX (BRAC ) BRACCO INT BV.
PA (DYAX-) DYAX CORP.

```

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XX Arbogast C, Bussat P, Dransfield DT, Fan H, Linder K;
PI Marinelli ER, Nanjappan P, Nunn A, Pillai R, Pochon S, Ramalingam K;
PI Sato A, Shrivastava A, Song B, Swenson RE, Von Wronski MA;
PI Walker SM;
XX
XX WPI; 2004-593275/57.
DR
XX
XX Multivalent compounds with at least two binding moieties having
PT specificity for different binding sites on the same target, useful for
PT treating and diagnosing, e.g. angiogenic and hyperproliferative
PT disorders.
XX
XX Example 6; SEQ ID NO 72; 320pp; English.
XX
XX The invention relates to a multivalent compound (C) comprising at least
CC two binding moieties having specificity for different binding sites on
CC the same target. (C) is useful for treating euplastic tumour growth and
CC disease associated with angiogenesis or hyperproliferation (claimed). (C)
CC is useful for treating diseases such as arthritis, atherosclerotic
CC plaques, corneal graft neovascularization or ocular diseases. (C) is
CC small and can more easily reach a target. (C) localizes more effectively
CC to the target site than other targeting compounds due to its binding to
CC more than one site on the same target. This sequence represents a DNA
CC oligonucleotide used in the invention.
XX
XX Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 251
ABN83378
ID ABN83378 standard; DNA; 29 BP.
XX
XX AC ABN83378;
XX
XX 15-AUG-2002 (first entry)
XX
XX Mononucleotide repeat locus BAT25 probe #1.
DE
DE Mononucleotide repeat locus; human; BAT25; probe; microsatellite; tumour;
KW ss.
KW
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FT modified_base 29
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Labelled with Fluorescein"
XX
XX BP1207210-A1.
PN
XX
XX 22-MAY-2002.
PD
XX
XX 13-NOV-2001; 2001EP-00126930.
PF
XX
XX 15-NOV-2000; 2000EP-00124897.
PR
XX
XX (HOFF ) ROCHE DIAGNOSTICS GMBH.
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
XX Dietmaier W;
PI
XX
XX WPI; 2002-437469/47.
XX
XX

```

PT Analyzing repeat sequences in DNA using a probe which hybridizes to
 PT adjacent repetitive and non-repetitive regions and determining hybrid
 PT melting point is useful to detect microsatellite instability such as in
 PT hereditary cancer.

XX Claim 16; Page 7; 19pp; English.

XX The present invention relates to a method for analysing a target nucleic
 CC acid consisting of repetitive and non-repetitive sequences. The method
 CC comprises hybridising a polynucleotide probe comprising a segment
 CC complementary to a non-repetitive region and a segment complementary to
 CC an adjacent repetitive region, where the second segment consists of a
 CC defined number of repeats, and determining the melting point temperature
 CC of the hybrid. The method is used to analyse microsatellites, especially
 CC microsatellite instability, particularly as a means for detecting
 CC hereditary tumours. Alternatively, the method is used to identify an
 CC individual in a population. The present sequence is a probe for
 CC Mononucleotide repeat locus BAT55, and was used to illustrate the
 CC invention

XX Sequence 29 BP; 26 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 29;
 Best Local Similarity 100.0%; Pred. No. 4e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 DB 2 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 252
 ADO81068/c
 ID ADO81068 standard; DNA; 28 BP.

XX ADO81068;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #80.

XX gene typing; polymorphic microsatellite loci; PMU;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX 26-FEB-2004.

XX 09-AUG-2002; 2002DE-01036711.

XX 09-AUG-2002; 2002DE-01036711.

XX (UVHO-) UNIV HOHENHEIM.

XX Geldermann H, Preuss S, Han Y;

XX WPI; 2004-215730/21.

XX Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.

XX Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and

CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.

XX Sequence 28 BP; 0 A; 2 C; 0 G; 26 T; 0 U; 0 Other;

Query Match 0.9%; Score 24.8; DB 1; Length 28;
 Best Local Similarity 92.9%; Pred. No. 4e+02;
 Matches 26; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2736
 DB 28 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 253

ADO30495/c

ID ADO30495 standard; DNA; 26 BP.

XX ADO30495;

XX 29-JUL-2004 (first entry)

XX 5' RACE PCR primer, SEQ ID NO:1598.

XX G protein-coupled receptor; GPCR; drug screening; diagnosis;
 KW transgenic mouse; neurological disorder; adrenal gland disorder;
 KW colon disorder; intestinal disorder; cardiovascular disorder;
 KW muscular disorder; blood disorder; immune disorder; bone disorder;
 KW joint disorder; metabolic disorder; nutritive disorder; cancer;
 KW kidney disorder; liver disorder; lung disorder; breast disorder;
 KW ovary disorder; uterus disorder; prostate disorder; testis disorder;
 KW skin disorder; stomach disorder; pancreas disorder; spleen disorder;
 KW thymus disorder; thyroid disorder; antiparkinsonian; antianemic;
 KW cytotoxic; antiinflammatory; vasotropic; antianginal; antiarrhythmic;
 KW CNS; central nervous system; respiratory; antidiarrhoeic; antidiabetic;
 KW virucide; hepatotropic; antibacterial; antitumor; anorectic;
 KW dermatological; antiulcer; antithyroid; antiallergic; antiseborrhoeic;
 KW immunosuppressive; nephrotropic; gene therapy; GPCR modulator;
 KW rapid amplification of cDNA ends; RACE PCR; primer; ss.

XX Synthetic.

XX WO2004040000-A2.

XX 13-MAY-2004.

XX 09-SEP-2003; 2003WO-US028226.

XX 09-SEP-2003; 2002US-0409303P.

XX 09-APR-2003; 2003US-0461329P.

XX (PRIM-) PRIMAL INC.

XX Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J, Li F;

XX Madisen L, Mcilwain KL, Pavlova MN, Vassiliadis D, Zeng H;

XX WPI; 2004-390329/36.

XX Novel mammalian G protein coupled receptors, useful for identifying
 PT compounds that modulates diagnosing and treating disease condition
 PT associated with GPCR dysfunction e.g. autoimmune diseases, angina
 PT pectoris, Parkinson's disease.

XX Disclosure; SEQ ID NO 1598; 542pp; English.

PS The invention relates to human and mouse G protein-coupled receptors

XX (GPCRs) and nucleic acids encoding them. The invention also relates to

CC sequences at least 90% identical to the GPCR proteins and nucleic acids

CC of the invention; methods of treating, preventing or diagnosing diseases

CC associated with GPCRs of the invention; methods of screening for

CC compounds useful in the treatment of GPCR-related diseases; a transgenic

CC mouse comprising a GPCR gene of the invention; a mouse comprising a

CC mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived

CC from the transgenic mice; kits comprising several mice, each of which has

CC a mutation in a different GPCR gene of the invention; and kits comprising

CC probes which hybridise to GPCR polynucleotides of the invention. The

CC invention further discloses variants of the GPCR polypeptides and vectors

CC comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may

CC be used in the diagnosis, treatment or prevention of a wide variety of

CC diseases including neurological disorders (e.g., Alzheimer's disease,

CC depression, diabetic neuropathy, Parkinson's disease or schizophrenia);

CC disorders of the adrenal gland; disorders of the colon or intestine

CC (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel

CC syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or

CC myocardial infarction); muscular disorders; blood disorders (e.g.,

CC anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or

CC AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid

CC arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g.,

CC obesity, enzyme deficiency-related diseases or vitamin deficiency-related

CC diseases); and disorders of the kidney, liver, lung, breast, ovary,

CC uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and

CC thyroid (e.g., cancers). The present sequence represents a RACE (rapid

CC amplification of cDNA ends) PCR primer used in the isolation of cDNA

CC encoding human GPCRs. Note: The full sequence data for this patent did

CC not form part of the printed specification; those sequences not shown

CC were obtained in electronic format directly from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences.

XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 2 Other;

Query Match 0.9%; Score 24.2; DB 1; Length 26;

Best Local Similarity 96.0%; Pred. No. 4.2e+02;

Matches 24; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732

Db 25 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 254

AAT99286

ID AAT99286 standard; DNA; 24 BP.

XX

AC AAT99286;

XX

DT 15-APR-1998 (first entry)

XX

DE POLYA, a competitor oligonucleotide for binding human PUR-alpha.

XX

KW PUR element; human; c-myc; inhibitor; hyperproliferative disease; ss;

XX cancer; probe; hybridisation.

XX

OS Synthetic.

OS Homo sapiens.

XX

XX US5672479-A.

XX

PD 30-SEP-1997.

XX

XX 07-JUN-1995; 95US-00486421.

XX

XX 28-AUG-1992; 92US-00938189.

PR

PR 02-FEB-1993; 93US-00014943.

PR

PR 06-JUN-1995; 95US-00470911.

XX

PA (MOUN) MOUNT SINAI SCHOOL MEDICINE.

XX

PI Bergemann AD, Johnson EM;

XX

DR WPI; 1997-488859/45.

XX

XX Assays for PUR protein ligands or modulators - using immobilised PUR

PT protein or fragments, to treat hyper-proliferative diseases, e.g. cancer.

XX

XX Example; Col 33; 64pp; English.

PS

XX The oligonucleotides AAT99279-T99286 were used as competitor

CC oligonucleotides for the binding of PUR protein to DNA. The PUR sequence

CC can be used to identify chemical or biological compounds that bind to PUR

CC or binding fragments of PUR. Inhibitors of PUR activity may be used to

CC treat hyperproliferative diseases such as cancer

XX

SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;

Best Local Similarity 100.0%; Pred. No. 4.2e+02;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732

Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 255

AAV31743

ID AAV31743 standard; DNA; 24 BP.

XX

AC AAV31743;

XX

DT 24-SEP-1998 (first entry)

XX

DE Nucleotide sequence of the oligonucleotide POLYA.

XX

KW PUR-alpha gene; inhibition; viral infection; cancer; PUR element;

XX hyperproliferative disease; ss.

XX

OS Synthetic.

XX

XX US5756684-A.

XX

PD 26-MAY-1998.

XX

PF 06-JUN-1995; 95US-00470911.

XX

XX 28-AUG-1992; 92US-00938189.

PR

PR 02-FEB-1993; 93US-00014943.

XX

XX (MOUN) MOUNT SINAI SCHOOL MEDICINE.

XX

PI Bergemann AD, Johnson EM;

XX

DR WPI; 1998-321632/28.

XX

XX PUR protein and its fragments - that inhibit PUR protein binding to PUR

PT element or other proteins.

XX

XX Example 7.1.1; Col 33; 63pp; English.

XX

CC This is the nucleotide sequence of an oligonucleotide used as a

CC competitor with the PUR element in the method of the invention, involving

CC the use of the PUR protein and its fragments, which inhibit PUR protein

CC binding to PUR element or other proteins. Inhibitors of PUR activity may

CC be useful for treating viral infections and hyperproliferative diseases

CC such as cancer

XX

SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;

```
Best Local Similarity 100.0%; Pred. No. 4.2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 24; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 256
AAAX04086
ID AAX04086 standard; DNA; 24 BP.
AC AAX04086;
XX
DT 12-APR-1999 (first entry)
DE Oligonucleotide POLYA used in PUR cloning and sequencing.
KW PUR element; PUR-alpha; hyperproliferative disease; cancer; human;
KW monoclonal antibody; identification; characterisation; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5869622-A.
XX
PD 09-FEB-1999.
XX
PF 07-JUN-1995; 95US-00486809.
XX
PR 28-AUG-1992; 92US-00938189.
PR 02-FEB-1993; 93US-00014943.
PR 06-JUN-1995; 95US-00470911.
XX
PA (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI Bergemann AD, Johnson EM;
XX
DR WPI; 1999-152881/13.
XX
PT Monoclonal antibody specific for PUR protein - useful for treating
PT cancer.
XX
PS Example; Col 33; 64pp; English.
XX
CC The present invention describes a monoclonal antibody that specifically
CC binds to an epitope of the PUR protein. Antibodies that bind to the PUR
CC protein and neutralise PUR activity may be used to treat
CC hyperproliferative diseases such as cancer. PUR antibodies may be used
CC diagnostically to detect aberrant expression of the PUR protein and/or
CC mutations in the PUR gene. The present sequence represents an
CC oligonucleotide used in the cloning and sequencing of the PUR protein and
CC its sequence element PUR repeat, in an example from the present invention
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 257
AAA40359/c
ID AAA40359 standard; RNA; 24 BP.
XX
AC AAA40359;
XX
DT 10-NOV-2000 (first entry)
XX
```

```
DE pBluescriptSK+ phagemid primer SEQ ID NO: 9.
XX Primer; cloning; ligation; ss.
XX Synthetic.
XX WO200036088-A1.
XX
PD 22-JUN-2000.
XX
PF 17-DEC-1999; 99WO-US030277.
XX
PR 17-DEC-1998; 98US-00213834.
XX
PA (ROMA/) ROMANTCHIKOV Y.
XX
PI Romantchikov Y;
XX
DR WPI; 2000-442381/38.
XX
PT Inserting a nucleic acid into a circular vector comprising joining their
PT ends, melting, and reannealing ends at two different concentrations,
PT useful for cloning small amounts of nucleic acids and forming genomic
PT libraries.
XX
PS Example 3; Page 67; 71pp; English.
XX
CC This invention describes a novel method (M1) for inserting a nucleic acid
CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
CC under a first nucleic acid concentration, melting hybridized cohesive
CC circularization ends, and reannealing the ends at a second concentration.
CC The methods are useful for the cloning small amounts of nucleic acids and
CC forming genomic libraries of complex populations of DNA or cDNA. The
CC methods allow the cloning of minute amounts of nucleic acids efficiently
CC and avoids the size selection problems of prior art systems. Larger
CC nucleic acid fragments are just as easily cloned, allowing highly
CC representative libraries to be made. Vector to vector ligation is avoided
CC using the methods. AAA40351-A40366 represents primers used to illustrate
CC the method of the invention
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 16 T; 8 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 258
AAA40353/c
ID AAA40353 standard; DNA; 24 BP.
XX
AC AAA40353;
XX
DT 10-NOV-2000 (first entry)
XX
DE pBluescriptSK+ phagemid primer SEQ ID NO: 3.
XX
KW Primer; cloning; ligation; ss.
XX
OS Synthetic.
XX
PN WO200036088-A1.
XX
PD 22-JUN-2000.
XX
PF 17-DEC-1999; 99WO-US030277.
XX
PR 17-DEC-1998; 98US-00213834.
XX
```


PA (ROMA/) ROMANTCHIKOV Y.
 PI Romantchikov Y;
 XX
 XX
 DR WPI; 2000-442381/38.
 XX
 PT Inserting a nucleic acid into a circular vector comprising joining their
 PT ends, melting, and reannealing ends at two different concentrations,
 PT useful for cloning small amounts of nucleic acids and forming genomic
 PT libraries.
 XX
 XX Example 1; Page 66; 7lpp; English.
 XX
 XX This invention describes a novel method (M1) for inserting a nucleic acid
 CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
 CC under a first nucleic acid concentration, melting hybridized cohesive
 CC circularization ends, and reannealing the ends at a second concentration.
 CC The methods are useful for the cloning small amounts of nucleic acids and
 CC forming genomic libraries of complex populations of DNA or cDNA. The
 CC methods allow the cloning of minute amounts of nucleic acids efficiently
 CC and avoids the size selection problems of prior art systems. Larger
 CC nucleic acid fragments are just as easily cloned, allowing highly
 CC representative libraries to be made. Vector to vector ligation is avoided
 CC using the methods. AAA0351-A40366 represents primers used to illustrate
 CC the method of the invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02; Indels 0; Gaps 0;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 259
 AAF99756/c
 ID AAF99756 standard; DNA; 24 BP.
 AC AAF99756;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #872.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.
 XX
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 25-SEP-2000; 2000WO-US026383.
 XX
 PR 25-SEP-1999; 99US-0156113P.
 PR 27-SEP-1999; 99US-0156135P.
 PR 23-AUG-2000; 2000US-0227436P.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Schetter C, Vollmer J;
 XX
 DR WPI; 2001-273485/28.
 XX
 PT Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 57; 338pp; English.
 PS
 XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02; Indels 0; Gaps 0;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 260
 AAF99304/c
 ID AAF99304 standard; DNA; 24 BP.
 AC AAF99304;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #420.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.
 XX
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 25-SEP-2000; 2000WO-US026383.
 XX
 PR 25-SEP-1999; 99US-0156113P.
 PR 27-SEP-1999; 99US-0156135P.
 PR 23-AUG-2000; 2000US-0227436P.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Schetter C, Vollmer J;
 XX
 DR WPI; 2001-273485/28.
 XX
 PT Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX
 PS Claim 101; Page 46; 338pp; English.
 XX
 XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 261

AAF99757
 ID AAF99757 standard; DNA; 24 BP.

AC AAF99757;

DT 12-JUN-2001 (first entry)

DE Immunostimulatory nucleic acid #873.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 57; 338pp; English.

XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the

CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 262

ABV14842/c
 ID ABV14842 standard; cDNA; 24 BP.

XX ABV14842;

XX 13-SEP-2002 (first entry)

XX Human prostate expression marker cDNA 14833.

XX Human; prostate cancer; cytostatic; carcinogen; pharmacodynamic marker;
 KW pharmacogenomic marker; gene; ss.

XX Homo sapiens.

XX WO200160860-A2.

XX 23-AUG-2001.

XX 20-FEB-2001; 2001WO-US005171.

XX 17-FEB-2000; 2000US-0183319P.

XX 16-MAR-2000; 2000US-0189862P.

XX 25-MAY-2000; 2000US-0207454P.

XX 09-JUN-2000; 2000US-0211314P.

XX 18-JUL-2000; 2000US-0219007P.

XX 13-DEC-2000; 2000US-0255281P.

XX (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.

XX Schlegel R, Endege WO, Monahan JB;

XX WPI; 2001-662795/76.

XX Novel isolated nucleic acid molecule associated with cancerous state of
 PT prostate cells and correlating with presence of prostate cancer, useful
 PT for detecting presence of prostate cancer, stage of prostate cancer.

XX Claim 1; Page 2483; 11750pp; English.

XX The invention relates to an isolated nucleic acid molecule (I) comprising
 CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
 CC specification or its complement. (I) is useful for: (a) assessing whether
 CC a patient is afflicted with prostate cancer; (b) monitoring the
 CC progression of prostate cancer in a patient; (c) assessing the efficacy
 CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
 CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
 CC (e) selecting a composition for inhibiting prostate cancer in a patient;
 CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
 CC determining whether prostate cancer has metastasized in a patient; (h)
 CC assessing the aggressiveness or indolence of prostate cancer in a patient
 CC ; (i) is also useful as a pharmacodynamic or pharmacogenomic marker

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

```

Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 263
ABS78477/c
ID  ABS78477 standard; DNA; 24 BP.
XX
AC  ABS78477;
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #961.
XX
KW  Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW  tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW  diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW  corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW  rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW  plaque neovascularisation; telangiectasia; haemophilic joint;
KW  angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW  scleroderma; hypertrophic scar.
XX
OS  Synthetic.
XX
PN  WO200253141-A2.
XX
PD  11-JUL-2002.
XX
PF  14-DEC-2001; 2001WO-US048458.
XX
PR  14-DEC-2000; 2000US-0255534P.
XX
PA  (COLE-) COLEY PHARM GROUP INC.
XX
PI  Bratzler RL;
XX
DR  WPI; 2002-566690/60.
XX
PT  Inhibiting angiogenesis in a subject, involves administering at least one
PT  antiangiogenic nucleic acid molecule to the subject.
XX
PS  Claim 2; Page 36; 276pp; English.
XX
CC  The invention relates to inhibiting angiogenesis in a subject, comprising
CC  administering at least one antiangiogenic nucleic acid molecule. Also
CC  included is a kit comprising a first container housing the antiangiogenic
CC  nucleic acids, and instructions for administering them to a subject
CC  having a condition characterised by unwanted angiogenesis. The method is
CC  useful for inhibiting angiogenesis associated with solid tumour growth,
CC  tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC  diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC  corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC  rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC  neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC  wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC  hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC  acid of the invention
XX
SQ  Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match      0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 264
ABS77949/c
ID  ABS77949 standard; DNA; 24 BP.
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #962.
XX
KW  Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW  tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW  diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW  corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW  rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW  plaque neovascularisation; telangiectasia; haemophilic joint;
KW  angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW  scleroderma; hypertrophic scar.
XX
OS  Synthetic.
XX
PN  WO200253141-A2.
XX
PD  11-JUL-2002.
XX
PF  14-DEC-2001; 2001WO-US048458.
XX
PR  14-DEC-2000; 2000US-0255534P.
XX
PA  (COLE-) COLEY PHARM GROUP INC.
XX
PI  Bratzler RL;
XX
DR  WPI; 2002-566690/60.
XX
PT  Inhibiting angiogenesis in a subject, involves administering at least one
PT  antiangiogenic nucleic acid molecule to the subject.
XX
PS  Claim 2; Page 27; 276pp; English.
XX
CC  The invention relates to inhibiting angiogenesis in a subject, comprising
CC  administering at least one antiangiogenic nucleic acid molecule. Also
CC  included is a kit comprising a first container housing the antiangiogenic
CC  nucleic acids, and instructions for administering them to a subject
CC  having a condition characterised by unwanted angiogenesis. The method is
CC  useful for inhibiting angiogenesis associated with solid tumour growth,
CC  tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC  diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC  corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC  rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC  neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC  wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC  hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC  acid of the invention
XX
SQ  Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match      0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 265
ABS78478
ID  ABS78478 standard; DNA; 24 BP.
XX
AC  ABS78478;
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #962.
XX

```

KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX Synthetic.
 XX WO200253141-A2.
 XX 11-JUL-2002.
 XX 14-DEC-2001; 2001WO-US048458.
 XX 14-DEC-2000; 2000US-0255534P.
 XX (COLE-) COLEY PHARM GROUP INC.
 XX Bratzler RL;
 XX WPI; 2002-566690/60.
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX Claim 2; Page 36; 276pp; English.
 XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma, and
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 24
 RESULT 266
 ABL39405/C
 ID ABL39405 standard; DNA; 24 BP.
 XX ABL39405;
 XX 16-APR-2002 (first entry)
 XX Immunostimulatory nucleic acid SEQ ID NO: 841.
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 1. 24

FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX WO200197843-A2.
 XX 27-DEC-2001.
 XX 22-JUN-2001; 2001WO-US020154.
 XX 22-JUN-2000; 2000US-0213346P.
 XX (IOWA) UNIV IOWA RES FOUND.
 XX Weiner G, Hartmann G;
 XX WPI; 2002-154611/20.
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX Disclosure; Page 309; 312pp; English.
 XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, leukaemia, liver cancer, lung cancer, kidney cancer, larynx
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 267
 ABA98840
 ID ABA98840 standard; DNA; 24 BP.
 XX ABA98840;
 XX 01-JUL-2002 (first entry)
 XX A24 oligonucleotide for the creation of Pc-A24.
 XX Component detection; clinical diagnosis; cell detection; drug detection;
 KW metabolite detection; pesticide detection; ligand detection; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 24 /*tag= a
 FT /label= OTHER
 FT /notes "modified by PO2OCH2CH2CH2SCH2CH2CH2OH"
 XX WO200184157-A2.

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XX PD 08-NOV-2001.
XX PF 03-MAY-2001; 2001WO-US014528.
XX PR 04-MAY-2000; 2000US-00564230.
XX PA (DADE-) DADE BEHRING INC.
XX PI Pease JS, Cromer R, Patel R, Kurn N, De Keczser S;
XX DR WPI; 2002-164078/21.
XX PT Detection of multiple analytes, e.g. ligands, receptors, polynucleotides
XX FT and pollutants, involves adding a combination of sensitizer reagents and
XX PT reactive reagent Actuable by a product of the sensitizer reagents.
XX PS Example; Page 58; 87pp; English.
XX CC The invention relates to the detection of multiple components in a
XX CC medium, comprising combining the medium with at least two sensitizer
XX CC reagents, and at least one reactive reagent activated by a product
XX CC generated by the sensitizer reagents when activated; and differentially
XX CC activating the sensitizer reagents. The combination of sensitizer
XX CC reagents and reactive reagent(s) allows differential detection of the
XX CC components. Methods of the invention may be used for the detection of
XX CC ligands, receptors and polynucleotides, and also for the detection of
XX CC e.g. cells, various drugs, metabolites, pesticides (e.g. polyhalogenated
XX CC biphenyls, phosphate esters, thiophosphates, carbamates and
XX CC polyhalogenated sulfenamides) and pollutants. Methods of the invention
XX CC allow the detection of multiple analytes in a single test medium. An
XX CC application of the methods of the present invention would be in the field
XX CC of clinical diagnostics. The current sequence represents A24
XX CC oligonucleotide for the creation of oligonucleotide coated phthalocyanine
XX CC sensitizer particles (Pc-A24)
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 268
AAS17869
ID AAS17869 standard; DNA; 24 BP.
XX AAS17869;
XX AC
XX DT 08-MAY-2002 (first entry)
XX DE A24 oligonucleotide used to create doptAR chemiluminescer particles.
XX KW Polymorphism detection; sequence detection; mutation detection; A24;
XX KW probe; non-dissociative termolecular complex; doptAR sensitizer particle;
XX KW single nucleotide polymorphism; SNP; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 24 /*tag= a
XX FT /note= "A is covalently linked to a
XX FT PO2OCH2CH2CH2SCH2CH2CH2OH moiety"
XX PN WO200190399-A2.
XX PD 29-NOV-2001.
XX XX

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PF 17-MAY-2001; 2001WO-US016089.
XX PR 19-MAY-2000; 2000US-00574596.
XX PA (DADE-) DADE BEHRING INC.
XX PI Patel RD;
XX DR WPI; 2002-097664/13.
XX PT Detecting presence of polynucleotide, differences between polynucleotide
XX FT sequences, useful for detecting single nucleotide polymorphism and
XX PT alleles of polynucleotide sequence involves use of three competitive
XX XX probes.
XX PS Example; Page 47; 75pp; English.
XX CC This invention represents a method for detecting the presence of a
XX CC polynucleotide sequence, differences in polynucleotide sequences or
XX CC mutations in genomic DNA. The method involves contacting 3
XX CC oligonucleotide probes with a sample containing a polynucleotide. The
XX CC first probe hybridises to a region of the polynucleotide sequence and the
XX CC second and third probes can bind a second region of the polynucleotide
XX CC sequence. The second and third probes are identical except for the
XX CC presence or difference of one or more nucleotides. The reaction medium is
XX CC then subjected to conditions for forming substantially non-dissociative
XX CC termolecular complexes, which can be at least one of, the polynucleotide
XX CC sequence with the first and second probes or the polynucleotide sequence
XX CC with the first and third probes. The oligonucleotide probes have labels
XX CC non-covalently bound to allow for their detection upon binding. The
XX CC method of the invention is useful for detecting the presence of a single
XX CC nucleotide polymorphism (SNP) in a fragment of genomic DNA. The method
XX CC can be used for the direct detection of nucleic acid in very small
XX CC quantities without amplification. In addition, the method may be carried
XX CC out with amplification of the target and reference sequences. This
XX CC sequence represents an oligonucleotide probe A24 used to create doptAR
XX CC chemiluminescer sensitizer particles in the method of the invention.
XX CC Binding the nucleic acid to a suspendable particle acts as a support and
XX CC provides a means of segregating the bound polynucleotide target from the
XX CC bulk solution
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 269
ABK15639/c
ID ABK15639 standard; DNA; 24 BP.
XX ABK15639;
XX AC
XX DT 08-MAY-2002 (first entry)
XX DE RNA-PCR procedure primer poly(dt)24.
XX KW RNA-PCR; primer; ss; poly(dt)24; cytostatic; antibacterial; gene therapy;
XX KW mRNA-CDNA hybrid; gene function inhibition; cancer; PTGS; antisense;
XX KW high throughput screening; D-RNAi; DNA-RNA interference; RdRP;
XX KW RNA dependent RNA polymerase; posttranscriptional gene silencing.
XX OS Synthetic.
XX PN WO200210374-A2.
XX PD 07-FEB-2002.
XX XX

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PF 02-AUG-2001; 2001WO-US024412.
 XX
 PR 02-AUG-2000; 2000US-0222479P.
 XX
 PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
 XX
 PI Lin S, Chuong C, Widelitz RB;
 XX
 XX WPI; 2002-188740/24.
 DR
 XX
 PT Generating mRNA-cDNA hybrids for suppressing cancer-related genes, or
 XX treating or preventing microbe related genes, comprises thermocycling
 PT steps of promoter-linked double-stranded cDNA or RNA synthesis.
 XX
 XX
 PS Example 5; Page 26; 53pp; English.
 XX
 CC The invention relates to generating mRNA-cDNA hybrids, comprising (a)
 CC providing a solution containing a nucleic acid template, one or more
 CC primers complementary to the sense conformation of the nucleic acid
 CC template, and one or more promoter-linked primers complementary to the
 CC antisense conformation of the nucleic acid template, and with an RNA
 CC promoter, (b) treating the nucleic acid template with the one of more
 CC primers to synthesise a first cDNA strand, (c) treating the first cDNA
 CC strand with one or more promoter-linked primers to synthesise a promoter-
 CC linked double-stranded nucleic acid, (d) treating the promoter-linked
 CC double-stranded nucleic acid to synthesise amplified mRNA fragments, and
 CC (e) treating the mRNA fragments with one or more primers to synthesise
 CC mRNA-cDNA hybrids by reverse transcription of the amplified mRNA
 CC fragments. The method is useful for preparing high amounts of pure and
 CC specific mRNA-cDNA hybrids for transducing biological effects of interest
 CC in vitro as well as in vivo for inhibiting gene function in prokaryotes
 CC and eukaryotes in vivo and in vitro, for suppressing cancer-related
 CC genes, in treating or preventing microbe related genes, in studying
 CC candidate molecular pathways with systematic knock out of involved
 CC molecules, in high throughput screening of gene functions based on
 CC microarray analysis, and as a tool in studying gene function in
 CC physiological conditions. The mRNA-cDNA hybrids may be used to screen for
 CC special gene functions, for manipulating gene expression in vitro, and
 CC for designing therapy for genetic diseases in vivo. The cDNA part of a D-
 CC RNAi (DNA-RNA interference) can be modified by nucleotide analogue
 CC incorporation to increase the stability and effectiveness of transfected
 CC probe activities. The RdRp (RNA dependent RNA polymerase) enzyme may
 CC provide higher affinity of the mRNA template of a D-RNAi compared to ds-
 CC RNA due to lower binding interaction between DNA-RNA duplexes than RNA-
 CC RNA duplexes. The cDNA part of a D-RNAi provides further antisense gene
 CC knockout activity in addition to the posttranscriptional gene silencing
 CC (PTGS) mechanisms of the sense-RNA template, resulting in multiple
 CC specific gene interference effects with one probe. The present sequence
 CC is a poly(dT) PCR primer used in conjunction with oligo(dC)10N primers to
 CC reverse transcribe mRNA into first strand cDNA in the method of the
 CC invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 270
 ID ABZ80181/c
 XX ABZ80181 standard; DNA; 24 BP.
 XX
 AC ABZ80181;
 XX
 XX 23-MAY-2003 (first entry)
 DT
 XX Immunostimulatory oligonucleotide SEQ ID NO:53.
 DE
 XX

KW Immunostimulation; immune response; natural killer cell; interferon;
 KW type 1 interferon; IFN; cancer; infectious disease; allergic disorder;
 KW immune related disorder; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..24
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "optionally phosphorothioate backbone"
 XX
 XX WO2003015711-A2.
 XX
 XX 27-FEB-2003.
 XX
 XX 19-AUG-2002; 2002WO-US026468.
 XX
 XX 17-AUG-2001; 2001US-0313273P.
 PR 03-JUL-2002; 2002US-0393952P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 XX Krieg AM, Vollmer J, Uhlman B;
 PI
 XX WPI; 2003-268241/26.
 DR
 XX New immunostimulatory nucleic acid, useful for preparing a composition
 PT for treating an allergic condition.
 PT
 XX Example 1; Page 44; 115pp; English.
 PS
 XX The present invention describes immunostimulatory nucleic acids of 14-100
 CC nucleotides in length comprising the formula 5' XDCGHX2 3' (I), where X1
 CC or X2 = independently any sequence 0-10 nucleotides; D = nucleotide other
 CC than C; C = cytosine; G = guanine; H = nucleotide other than G. The
 CC immunostimulatory nucleic acid further comprises a sequence consisting of
 CC P and N positioned immediately 5' to X1 or 3' to X2 and N is a B cell
 CC neutralising sequence, where N begins with a CGG trinucleotide and is at
 CC least 10 nucleotides long and P is GC-rich palindromic containing sequence
 CC at least 10 nucleotides long. Also described: (1) a pharmaceutical
 CC composition comprising the immunostimulatory nucleic acid and a carrier;
 CC and (2) treating an allergic condition. (I) has antiallergic activity and
 CC can be used in gene therapy. (I) can be used for preparing a composition
 CC for treating a variety of immune related disorders such as cancer,
 CC infectious diseases and allergic disorders. (I) also stimulates the
 CC activation of natural killer cells and the production of type 1
 CC interferon (IFN). The present sequence represents an immunostimulatory
 CC oligonucleotide, which is used in an example from the present invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 271
 ID ACA62284/c
 XX ACA62284 standard; DNA; 24 BP.
 XX
 AC ACA62284;
 XX
 XX 12-AUG-2003 (first entry)
 DT
 XX Oligo (dT)24 RT-PCR primer.
 DE
 XX

KW ss: PCR; RT-PCR; primer; reverse transcriptase PCR; antisense therapy;
 XX mRNA expression profile; promoter containing primer.
 OS Synthetic.
 XX US2003022318-A1.
 PN 30-JAN-2003.
 PD 07-SEP-2001; 2001US-00949305.
 PF 25-JAN-2000; 2000US-00494212.
 PR (EPIC-) EPICLONE INC.
 PA Lin S, Ying S;
 PI WPI; 2003-479488/45.
 DR
 XX
 XX Improved polymerase thermocycling reaction for nucleic acid
 PT amplification, by thermal cycling of promoter-linked nucleic acid
 PT template synthesis and in vitro transcriptional amplification of nucleic
 PT acid sequences.
 XX Example 7; Page 14; 28pp; English.
 PS
 XX The invention relates to an improved polymerase thermocycling reaction
 CC (M1) for linear amplification of nucleic acid sequences, involves
 CC denaturing a number of nucleic acid templates (I), combining the
 CC denatured (I) with a promoter-containing primer (P1), a primer (P2), a
 CC number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
 CC a reverse transcription enzyme, a DNA-dependent DNA polymerase and RNA
 CC polymerase, contacting P1 with (I) to generate a number of promoter-
 CC containing templates, denaturing the promoter-containing templates,
 CC contacting P2 with the denatured promoter-containing templates to
 CC generate a number of promoter-containing double-stranded templates to
 CC where the double-stranded nucleic acid templates are flanked by P1 in one
 CC end and P2 in the other end of the other orientation, transcribing the
 CC promoter-containing double-stranded DNA templates to form a number of
 CC amplified RNA sequences, including the primer region of the promoter-
 CC containing double-stranded DNA templates, contacting the amplified RNA
 CC sequences with P2 to form a number of cDNAs and a number of DNA-RNA
 CC hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
 CC is useful for improved polymerase thermocycling reaction for linear
 CC amplification of nucleic acid sequences, and thus for producing mRNA
 CC expression profile of a cell by M1 to generate multiple copies of the
 CC mRNA. M1 is also useful for determining aberrant protein production of
 CC cells in a diseased state, by generating an expression profile by the
 CC above method, of cells in both normal and diseased states, comparing the
 CC expression profile of the cells in the normal and diseased states,
 CC determining the differences in mRNA composition of the cell(s) in the
 CC diseased state, isolating the mRNA sequences of cell(s) in the diseased
 CC state that differ from mRNA in cell(s) in non-diseased state, amplifying
 CC the isolated mRNA by M1, and determining aberrant protein function of the
 CC protein coded for by the isolated mRNA. M1 is also useful for treating a
 CC cell in a diseased state caused by aberrant protein production, by
 CC determining protein expression of a cell in a diseased state, determining
 CC the mRNA sequence for the aberrant proteins, synthesising an antisense
 CC sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
 CC delivering a pharmaceutically effective dosage of a composition
 CC comprising the anti-sense mRNA and a compatible lipid based biological
 CC carrier. M1 is also useful for predicting the efficacy of a proposed drug
 CC targeted against an aberrant protein, by determining aberrant protein
 CC production of cell in a diseased state by the above method, amplifying
 CC the aberrant protein by M1 and using recombinant techniques to determine
 CC the effect of proposed drug on the aberrant protein. M1 is also useful
 CC for differential screening of tissue-specific gene expression at a
 CC cellular level, for preparing labeled RNA/DNA probes for a gene chip
 CC technology, and for determining the efficacy of a drug regimen against a
 CC gene or its cDNAs. The present sequence is an Oligo (dnp)24 RT-(reverse
 CC transcriptase) PCR primer used to produce first strand cDNA in the method
 CC of the invention
 XX

SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 272
 ACD99729/c
 ID ACD99729 standard; DNA; 24 BP.
 XX
 AC ACD99729;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #415.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI; 2003-521815/49.
 XX
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 20; 229pp; English.
 XX
 CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 273
 ACH03285
 ID ACH03285 standard; DNA; 24 BP.
 XX


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AC ACH03285;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #920.
DE
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
PA (BERG/) BERG D J.
XX
PI Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
DR Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 34; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAA 24
XX
RESULT 274
ACH03284/C
ID ACH03284 standard; DNA; 24 BP.
XX
AC ACH03284;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #919.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX

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PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
PA (BERG/) BERG D J.
XX
PI Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
DR Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 34; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 275
ADA66379
ID ADA66379 standard; mRNA; 24 BP.
XX
AC ADA66379;
XX
DT 20-NOV-2003 (first entry)
XX
DE mRNA poly A.
XX
KW ss; nucleic acid amplification; multiple step elimination;
KW varying reaction condition elimination; poly A tract.
XX
OS Unidentified.
XX
XX Key Location/Qualifiers
FT primer_bind 1..24
FT /*tag= a
FT /note= "Binds to nucleotides 42-19 of the 1st strand cDNA
FT synthesis primer"
XX
PN US6582938-B1.
XX
PD 24-JUN-2003.
XX
PF 11-MAY-2001; 2001US-00854317.
XX
PR 11-MAY-2001; 2001US-00854317.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
XX Su X, Dong H, Ryder TB;
XX WPI; 2003-656427/62.
XX

```

XX Amplification of nucleic acids, where the promoter is blocked from
PT extension at the 3' end, useful for eliminating multiple step reactions.
XX
XX Disclosure; Fig 2; 9pp; English.
XX
XX The invention relates to a method of amplification of nucleic acid which
CC comprises primer extension by reverse transcriptase and hybridising an
CC oligonucleotide to the single stranded DNA, where the oligonucleotide is
CC blocked from extension at the 3' end. The method is useful for
CC amplification of nucleic acids. In the new method, a promoter is
CC protected from degradation throughout the method. The promoter is
CC constructed so that it does not serve as a primer for extension of a
CC sequence that is complementary to the target sequence, i.e. it is
CC blocked. The method can be combined with other processes to eliminate the
CC need for multiple steps and varying reaction conditions and their
CC associated problems. At least three otherwise separate enzymatic
CC reactions can occur consecutively in one phase (i.e., without organic
CC extraction and precipitation), more preferably in the same reaction
CC vessel. Preferably, cDNA synthesis according to the new method may occur
CC in a modified low salt buffer. The present sequence represents the poly A
CC tract of a mRNA used to illustrate the method of the invention.
XX
XX Sequence 24. BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAA 24
RESULT 276
ADB37258/c
ID ADB37258 standard; DNA; 24 BP.
XX
XX ADB37258;
XX
XX 04-DEC-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #872.
XX
XX de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
XX Synthetic.
XX
XX US2003087848-A1.
XX
XX 08-MAY-2003.
XX
XX 02-FEB-2001; 2001US-00776479.
XX
XX 03-FEB-2000; 2000US-0179991P.
XX
XX (BRAT/) BRATZLER R L.
XX (PETE/) PETERSEN D M.
XX (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 18; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 278
ADB37259
ID ADB37259 standard; DNA; 24 BP.
XX
XX

CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 277
ADB36806/c
ID ADB36806 standard; DNA; 24 BP.
XX
XX ADB36806;
XX
XX 04-DEC-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #420.
XX
XX de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
XX Synthetic.
XX
XX US2003087848-A1.
XX
XX 08-MAY-2003.
XX
XX 02-FEB-2001; 2001US-00776479.
XX
XX 03-FEB-2000; 2000US-0179991P.
XX
XX (BRAT/) BRATZLER R L.
XX (PETE/) PETERSEN D M.
XX (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 11; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 278
ADB37259
ID ADB37259 standard; DNA; 24 BP.
XX
XX

```

AC ADB37259;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #873.
XX
XX KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX WI; 2003-657977/62.
XX
XX KW Treating and/or preventing allergy or asthma using an immunostimulatory
XX KW nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX PS Disclosure; Page 18; 221pp; English.
XX
XX CC The invention relates to a method of treating or preventing allergy or
XX CC asthma which comprises administering to a subject a poly-G nucleic acid
XX CC in an aerosol formulation. The methods and compositions of the present
XX CC invention are useful for diagnosing and/or treating asthma and allergy
XX CC especially in a hypo-responsive subject. The present sequence represents
XX CC an immunostimulatory nucleic acid of the invention.
XX
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 279
ADD31867/c
ID ADD31867 standard; DNA; 24 BP.
XX
XX AC ADD31867;
XX
XX DT 15-JAN-2004 (first entry)
XX
XX DE Butterfly biliverdin binding protein BBP-BIX oligonucleotide SEQ ID:106.
XX
XX KW recombination product; synthetic gene technology; butterfly;
XX KW biliverdin binding protein; ss.
XX
XX OS Synthetic.
XX
XX PN WO2003064611-A2.
XX
XX PD 07-AUG-2003.
XX
XX PF 29-JAN-2003; 2003WO-US002612.
XX
XX PR 30-JAN-2002; 2002US-00062188.
XX

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PA (EGEA-) EGEA BIOSCIENCES INC.
XX
XX PI Evans GA;
XX
XX DR WPI; 2003-663477/62.
XX
XX PT Creating recombination products between two distinct nucleotide
XX PT sequences, useful in the field of synthetic gene technology, and in
XX PT assembling a library, or a population or a collection of polypeptide
XX PT variants.
XX
XX PS Example 3; SEQ ID NO 106; 132pp; English.
XX
XX CC The present invention describes a method for creating a collection of
XX CC recombination products between two nucleotide sequences. The method
XX CC comprises combining an initial set of oligonucleotides corresponding to a
XX CC first nucleotide sequence with a subsequent set of oligonucleotides
XX CC corresponding to a distinct nucleotide sequence and further combining the
XX CC initial and subsequent sets of combination oligonucleotides having a
XX CC sequence region corresponding to the initial nucleotide sequence and a
XX CC sequence region corresponding to the second oligonucleotide sequence.
XX CC Also described is a method of creating a collection of recombination
XX CC products between two genes. The methods and compositions of the present
XX CC invention are useful in the field of synthetic gene technology, and more
XX CC specifically, to generating a collection of recombination products
XX CC between distinct nucleotide sequences. They can also be used in
XX CC assembling a library, or a population or a collection of polypeptide
XX CC variants that correspond to single or multiple polynucleotide
XX CC recombination products. The present sequence is used in the
XX CC exemplification of the present invention.
XX
XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 280
ADE25524/c
ID ADE25524 standard; DNA; 24 BP.
XX
XX AC ADE25524;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Rolling circle amplification related probe control oigo POS1/2.
XX
XX KW RCA; rolling circle amplification; genotyping;
XX KW single-nucleotide polymorphism; single base extension; SBE;
XX KW immuno-hybridisation; probe; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 24
XX FT /*tags a
XX FT /mod_base= OTHER
XX FT /notes "optional biotin label"
XX
XX PN WO2003066817-A2.
XX
XX PD 14-AUG-2003.
XX
XX PF 06-FEB-2003; 2003WO-US003533.
XX
XX PR 06-FEB-2002; 2002US-0355374P.
XX
XX PA (AMSH ) AMERSHAM BIOSCIENCES AB.

```

XX PI Xia J;
 XX DR WPI; 2003-697450/66.
 XX PT Detecting nucleic acid targets, useful e.g. for diagnosing single
 XX PT nucleotide polymorphisms, by extension of capture probe complementary to
 XX PT open circle probe.
 XX PS Example 1; Fig 5; 66pp; English.
 XX CC The invention is directed to novel methods of amplifying and detecting
 XX CC DNA using rolling circle amplification (RCA). The invention relates to
 XX CC detecting a target sequence (I), which involves using a capture probe
 XX CC (CP) that is complementary to an open circle probe and includes a
 XX CC cleavage site. The method comprises: attaching a capture probe (CP) to a
 XX CC substrate, at both ends, where the CP includes one domain complementary
 XX CC to an OCP (open circle probe) and a second domain that contains a
 XX CC cleavage site (CS), to form a device; treating CP with (I) and OCP for
 XX CC form a hybridisation complex (HC); treating HC with a ligase so that OCP
 XX CC is circularised, forming a second complex (HC2); treating CP with a
 XX CC cleavage agent, to cut at CS, and adding an extension enzyme (EE) and
 XX CC nucleotide triphosphates (NTPs) to form an extended CP, which is
 XX CC detected. The method is used for detecting (I) that comprises two target
 XX CC domains (TD1, TD2) and (I) that comprises two adjacent target domains.
 XX CC The method is used for detection, genotyping and/or quantification of
 XX CC target sequences, for research, clinical use, quality control or field
 XX CC testing, particularly detection of single-nucleotide polymorphisms. The
 XX CC method permits a high level of multiplexing, and since it provides
 XX CC localized product detection, with linear kinetics, is sensitive enough
 XX CC for direct detection and quantitation of unmodified targets. The present
 XX CC sequence is that of a single base extension (SBE) probe used in SNP
 XX CC genotyping with RCA signal amplification to demonstrate the method of the
 XX CC invention.
 XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 281
 AAD62664/C
 ID AAD62664 standard; DNA; 24 BP.
 XX AC AAD62664;
 XX DT 12-FEB-2004 (first entry)
 XX DE Immunostimulatory T-rich oligonucleotide #2183.
 XX KW Antibody dependent cellular cytotoxicity; ADCC; immune response; wart;
 XX KW imidazoquinoline agent; asthma; allergy; infectious disease; cancer;
 XX KW cytostatic; antimicrobial; dermatological; virucide; ss.
 XX OS Unidentified.
 XX PN US2003139364-A1.
 XX PD 24-JUL-2003.
 XX PF 15-OCT-2002; 2002US-00272502.
 XX PR 12-OCT-2001; 2001US-0329208P.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PI Krieg AM, Schetter C, Bratzler RL, Vollmer J, Jurk M, Bauer S;

XX WPI; 2003-829705/77.
 XX PT Stimulating antibody dependent cellular cytotoxicity, modulating immune
 XX PT response and inducing antigen-specific immune response in subject by
 XX PT administering imidazoquinoline agents in conjunction with other agents.
 XX PS Disclosure; Page 11; Opp; English.
 XX CC The invention relates to methods for stimulating antibody dependent
 XX CC cellular cytotoxicity (ADCC), for modulating immune response and for
 XX CC inducing antigen-specific immune response which involve administering
 XX CC imidazoquinoline agents in conjunction with other agents. The method is
 XX CC useful for stimulating ADCC in a subject having a disorder chosen from
 XX CC asthma/allergy, infectious disease, cancer and warts. The present
 XX CC sequence is an immunostimulatory oligonucleotide used to illustrate the
 XX CC method of the invention
 XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 282
 ACA58802/C
 ID ACA58802 standard; DNA; 24 BP.
 XX AC ACA58802;
 XX DT 10-JUN-2003 (first entry)
 XX DE Gastric ulcer treatment immunostimulatory nucleic acid #148.
 XX KW Gastric ulcer; ss; immunostimulant; equine gastric ulcer syndrome; EGUS;
 XX KW Helicobacter pylori.
 XX OS Synthetic.
 XX PN US2002198165-A1.
 XX PD 26-DEC-2002.
 XX PF 01-AUG-2001; 2001US-00920313.
 XX PR 01-AUG-2000; 2000US-0222248P.
 XX PA (BRAT/) BRATZLER R L.
 XX PA (PETE/) PETERSEN D M.
 XX PI Bratzler RL, Petersen DM;
 XX DR WPI; 2003-370798/35.
 XX PT Prevention or treatment of gastric ulcer involves administering nucleic
 XX PT acid.
 XX PS Disclosure; Page 14; 45pp; English.
 XX CC The invention relates to a method of prevention or treatment of gastric
 XX CC ulcer comprising administering a nucleic acid to a subject in need for
 XX CC treatment of gastric ulcer. A nucleic acid sample comprising
 XX CC oligonucleotide 2006 was administered to a mouse model by an oral route
 XX CC or a vehicle control. Colonisation of mice by Helicobacter pylori was
 XX CC assessed at time points from 1 day to 1 month after treatment. The
 XX CC ability of the nucleic acid to reduce H. pylori colonisation was
 XX CC assessed. The method is useful for preventing or treating a gastric ulcer
 XX CC on a subject e.g. human or non-human vertebrate animal including dog,

CC cat, horse (equine gastric ulcer syndrome, EGUS), cow, goat, sheep, pig,
 CC rabbit, turkey, chicken, primate, rat and mouse. The method effectively
 CC treats or prevents gastric ulcers. The present sequence represents an
 CC immunostimulatory nucleic acid for the treatment of gastric ulcers
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 283
 ADG75917/c
 ID ADG75917 standard; DNA; 24 BP.
 XX
 AC ADG75917;
 DT 11-MAR-2004 (first entry)
 XX
 DE Non-CpG DNA oligonucleotide IMT 053 SeqID 19.
 XX
 KW ss; CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.
 XX
 OS Synthetic.
 XX WO2003101375-A2.
 PN 11-DEC-2003.
 PD 30-MAY-2003; 2003WO-EP005691.
 PF 30-MAY-2002; 2002CA-02388049.
 PR (IMMU-) IMMUNOTECH SA.
 PA Lopez RA;
 PI WPI; 2004-053333/05.
 DR New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.
 XX
 PS Example 3; SEQ ID NO 19; 139pp; English.
 XX This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoral disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is the non-CpG DNA oligo IMT
 CC 053, used in an exemplification of the invention.
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 284
 ADR48246
 ID ADR48246 standard; DNA; 24 BP.
 XX
 AC ADR48246;
 XX
 DT 18-NOV-2004 (first entry)
 XX
 DE Microarray synthesised oligonucleotide #10.
 XX
 KW ss; deposition unit misalignment; polymeric array synthesis;
 KW pulse jet misalignment; printhead misalignment; microarray.
 XX
 OS Synthetic.
 XX US2004170984-A1.
 PN 02-SEP-2004.
 PD 25-FEB-2003; 2003US-00374307.
 PF 25-FEB-2003; 2003US-00374307.
 PR (LEPR/) LEPROUST E M.
 PA (AMOR/) AMORESE D A.
 PA (KRON/) KRONICK M N.
 XX
 PI Leproust EM, Amorese DA, Kronick MN;
 XX WPI; 2004-634540/61.
 DR Detection of deposition unit misalignment of in situ polymeric array
 PT synthesis device, by contacting test probe feature with different
 PT distinguishably labeled targets, and evaluating binding of labeled
 PT targets to test probe feature.
 XX
 PS Example 2; Page 16; 36pp; English.
 XX The invention relates to a method of detection of deposition unit
 CC misalignment of an in situ polymeric array synthesis device which
 CC comprises synthesising test probe feature(s) on substrate using in situ
 CC polymeric array synthesis device, contacting test probe feature with at
 CC least two different distinguishably labelled targets and evaluating
 CC binding of labelled targets to test probe feature to detect any pulse jet
 CC misalignment of polymeric array synthesis device. The method is useful
 CC for detecting deposition unit misalignment e.g. printhead misalignment,
 CC of an in situ polymeric, e.g. nucleic acid, array synthesis device. The
 CC method is easy to use, cost effective, effective at detecting printhead
 CC misalignments and may enable immediate detection and/or adjustments of
 CC one or more printheads of an in situ nucleic acid array synthesis fluid
 CC deposition device if misalignment is detected. The present sequence
 CC represents an oligonucleotide synthesised on a microarray.
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 24

```

RESULT 285
ADR48249/C
ID  ADR48249 standard; DNA; 24 BP.
XX
XX  ADR48249;
AC
XX
XX  18-NOV-2004 (first entry)
DT
XX
XX  Microarray synthesised oligonucleotide #13.
DE
XX
XX  ss; deposition unit misalignment; polymeric array synthesis;
KW  pulse jet misalignment; printhead misalignment; microarray.
XX
XX  Synthetic.
OS
XX
XX  US2004170984-A1.
FN
XX
XX  02-SEP-2004.
PD
XX
XX  25-FEB-2003; 2003US-00374307.
PF
XX
XX  25-FEB-2003; 2003US-00374307.
PR
XX
XX  (LEPROUST E M.
PA  (AMOR/) AMORESE D A.
PA  (KRON/) KRONICK M N.
XX
XX  Leproust EM, Amorese DA, Kronick MN;
PI
XX
XX  WPI; 2004-634540/61.
DR
XX
XX  Detection of deposition unit misalignment of in situ polymeric array
PT  synthesis device, by contacting test probe feature with different
PT  distinguishably labeled targets, and evaluating binding of labeled
PT  targets to test probe feature.
XX
XX  Example 2; Page 16; 36pp; English.
PS
XX
XX  The invention relates to a method of detection of deposition unit
CC  misalignment of an in situ polymeric array synthesis device which
CC  comprises synthesising test probe feature(s) on substrate using in situ
CC  polymeric array synthesis device, contacting test probe feature with at
CC  least two different distinguishably labelled targets and evaluating
CC  binding of labelled targets to test probe feature to detect any pulse jet
CC  misalignment of polymeric array synthesis device. The method is useful
CC  for detecting deposition unit misalignment e.g. printhead misalignment,
CC  of an in situ polymeric, e.g. nucleic acid, array synthesis device. The
CC  method is easy to use, cost effective, effective at detecting printhead
CC  misalignments and may enable immediate detection and/or adjustments of
CC  one or more printheads of an in situ nucleic acid array synthesis fluid
CC  deposition device if misalignment is detected. The present sequence
CC  represents an oligonucleotide synthesised on a microarray.
XX
XX  Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db  24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 286
ADU90278
ID  ADU90278 standard; DNA; 24 BP.
XX
XX  ADU90278;
AC
XX
XX  10-FEB-2005 (first entry)
DT
XX
XX  Allergic response suppressor oligonucleotide #962.
DE

```

```

XX  ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
KW  antibacterial; virucide; immunoglobulin E antagonist; allergy;
KW  immunostimulator; asthma; rhinitis; urticaria; dermatitis;
KW  bacterial infection; viral infection.
XX
XX  Synthetic.
OS
XX
XX  US2004235774-A1.
FN
XX
XX  25-NOV-2004.
PD
XX
XX  23-APR-2004; 2004US-00831778.
PF
XX
XX  03-FEB-2000; 2000US-0179991P.
PR  02-FEB-2001; 2001US-00776479.
XX
XX  (BRAT/) BRATZLER R L.
PA  (PETE/) PETERSEN D M.
PA  (FOUR/) FOURON Y.
XX
XX  Bratzler RL, Petersen DM, Fouron Y;
PI
XX
XX  WPI; 2004-833006/82.
DR
XX
XX  Suppressing allergies, including asthma, rhinitis, urticaria and atopic
PT  dermatitis, in a subject, comprises administering a first and second dose
PT  of an immunostimulatory nucleic acid.
XX
XX  Disclosure; SEQ ID NO 962; 235pp; English.
PS
XX
XX  The invention relates to a method of suppressing a symptom of an allergic
CC  response in a subject by administering a first and second dose of an
CC  immunostimulatory nucleic acid that comprises a nucleotide sequence
CC  comprising 5'-cg-3', and where the second dose is administered from 1 day
CC  to 8 weeks after the first dose. The methods and compositions of the
CC  present invention are useful for the treatment or prevention of asthma
CC  and allergy, including rhinitis, urticaria and atopic dermatitis, using
CC  an immunostimulatory nucleic acid alone or in combination with other
CC  medicaments. They can also be used in preventing bacterial and viral
CC  infections. This sequence represents an oligonucleotide used in the
CC  method of the invention.
XX
XX  Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db  1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 287
ADU90277/C
ID  ADU90277 standard; DNA; 24 BP.
XX
XX  ADU90277;
AC
XX
XX  10-FEB-2005 (first entry)
DT
XX
XX  Allergic response suppressor oligonucleotide #961.
DE
XX
XX  ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
KW  antibacterial; virucide; immunoglobulin E antagonist; allergy;
KW  immunostimulator; asthma; rhinitis; urticaria; dermatitis;
KW  bacterial infection; viral infection.
XX
XX  Synthetic.
OS
XX
XX  US2004235774-A1.
PN
XX

```

```

PD 25-NOV-2004.
XX
XX PF 23-APR-2004; 2004US-00831778.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX PR 02-FEB-2001; 2001US-00776479.
XX
XX (BRAT/) BRATZLER R L.
XX (PETE/) PETERSEN D M.
XX (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2004-833006/82.
XX
XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX dermatitis, in a subject, comprises administering a first and second dose
XX of an immunostimulatory nucleic acid.
XX
XX Disclosure; SEQ ID NO 961; 235pp; English.
XX
XX The invention relates to a method of suppressing a symptom of an allergic
XX response in a subject by administering a first and second dose of an
XX immunostimulatory nucleic acid that comprises a nucleotide sequence
XX comprising 5'-cg-3', and where the second dose is administered from 1 day
XX to 8 weeks after the first dose. The methods and compositions of the
XX present invention are useful for the treatment or prevention of asthma
XX and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX an immunostimulatory nucleic acid alone or in combination with other
XX medicaments. They can also be used in preventing bacterial and viral
XX infections. This sequence represents an oligonucleotide used in the
XX method of the invention.
XX
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 4.2e+02;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
XX | | | | | | | | | | | | | | | | | |
XX Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 288
XX ADU89749/C
XX ID ADU89749 standard; DNA; 24 BP.
XX
XX AC ADU89749;
XX
XX 10-FEB-2005 (first entry)
XX
XX Allergic response suppressor oligonucleotide #433.
XX
XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX immunostimulator; asthma; rhinitis; urticaria; dermatitis;
XX bacterial infection; viral infection.
XX
XX Synthetic.
XX
XX US2004235774-A1.
XX
XX 25-NOV-2004.
XX
XX 23-APR-2004; 2004US-00831778.
XX
XX 03-FEB-2000; 2000US-0179991P.
XX 02-FEB-2001; 2001US-00776479.
XX
XX (BRAT/) BRATZLER R L.
XX (PETE/) PETERSEN D M.
XX (FOUR/) FOURON Y.
XX

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XX Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2004-833006/82.
XX
XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX dermatitis, in a subject, comprises administering a first and second dose
XX of an immunostimulatory nucleic acid.
XX
XX Disclosure; SEQ ID NO 433; 235pp; English.
XX
XX The invention relates to a method of suppressing a symptom of an allergic
XX response in a subject by administering a first and second dose of an
XX immunostimulatory nucleic acid that comprises a nucleotide sequence
XX comprising 5'-cg-3', and where the second dose is administered from 1 day
XX to 8 weeks after the first dose. The methods and compositions of the
XX present invention are useful for the treatment or prevention of asthma
XX and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX an immunostimulatory nucleic acid alone or in combination with other
XX medicaments. They can also be used in preventing bacterial and viral
XX infections. This sequence represents an oligonucleotide used in the
XX method of the invention.
XX
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 4.2e+02;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
XX | | | | | | | | | | | | | | | | | |
XX Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 289
XX ADV86472/C
XX ID ADV86472 standard; DNA; 24 BP.
XX
XX AC ADV86472;
XX
XX 24-MAR-2005 (first entry)
XX
XX Fluorophore-labeled biological detection oligonucleotide #5.
XX
XX fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX
XX Synthetic.
XX
XX US6838244-B1.
XX
XX 04-JAN-2005.
XX
XX 18-MAY-2001; 2001US-00859736.
XX
XX 19-MAY-2000; 2000US-0205452P.
XX
XX (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX Li WR, Zhou JS;
XX
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
XX for detecting biological molecules e.g., antibody, antigen, avidin or
XX protein.
XX
XX Example 1; SEQ ID NO 5; 18pp; English.
XX
XX The invention relates to an oligonucleotide molecule (ON) labeled with
XX several fluorophores of one or more types embedded in its backbone, where
XX one or more of the fluorophores is not located at either the 3' or 5'
XX terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX useful for detecting biological molecules e.g., antibody, antigen,

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FT      /note= "optionally labelled with the donor
FT      carboxyfluorescein"
FT      17
FT      /*tag= b
FT      /note= "optionally labelled with the acceptor 6-
FT      carboxyrhodamine"
XX      WO9831834-A1.
XX      23-JUL-1998.
XX      12-DEC-1997; 97WO-US022914.
XX      15-JAN-1997; 97US-00784162.
XX      (INCY-) INCYTE PHARM INC.
XX      Ju J;
XX      WPI; 1998-414127/35.
XX      Set of energy-transfer fluorescent labels with donor and acceptor at
XX      different separations - useful for DNA sequencing allows use of fewer
XX      analysing wavelengths or an increased throughput.
XX      Example 1; Page 14; 30pp; English.
XX      The present sequence exemplified the primer of the invention, and is
XX      used to sequence Incyte clone 1 (AAV42737). The primer of the invention
XX      is labelled with a set of at least 2 different fluorescent labels. The
XX      set comprises an energy-transfer fluorescent label with at least 1 each
XX      of a donor fluorophore and an acceptor fluorophore capable of energy
XX      transfer, and separated by a distance x, and a second similar fluorescent
XX      label in which the separation distance is y, x and y being sufficiently
XX      different for the two fluorescent labels to produce distinct fluorescent
XX      signals. Fluorescent labels are useful in multicomponent analyses, e.g.
XX      as probes for fluorescent in situ hybridisation or especially as primers
XX      for DNA sequencing
XX      Sequence 25 BP; 1 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
XX      Query Match 0.9%; Score 24; DB 1; Length 25;
XX      Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX      Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2731
Qy      |||||
Db      24 TAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 295
AAx84258/c
ID AAX84258 standard; DNA; 25 BP.
XX
AC AAX84258;
XX
DT 08-SEP-1999 (first entry)
XX
DE PCR primer for human Nck associated protein 1 coding sequence.
XX
KW Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
XX WO9931239-A1.
XX
XX 24-JUN-1999.
XX
XX 14-DEC-1998; 98WO-JP005646.
XX
XX 15-DEC-1997; 97JP-00363183.
XX
XX (KYOW ) KYOWA HAKKO KOGYO KK.
XX (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Disclosure; Page 77; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;
XX
XX Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX      (KYOW ) KYOWA HAKKO KOGYO KK.
XX      (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Example 1; Page 76; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 0 C; 1 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;
XX
XX Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Qy      |||||
Db      24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 296
AAx84260/c
ID AAX84260 standard; DNA; 25 BP.
XX
AC AAX84260;
XX
DT 08-SEP-1999 (first entry)
XX
XX PCR primer for human Nck associated protein 1 coding sequence.
XX
XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9931239-A1.
XX
XX 24-JUN-1999.
XX
XX 14-DEC-1998; 98WO-JP005646.
XX
XX 15-DEC-1997; 97JP-00363183.
XX
XX (KYOW ) KYOWA HAKKO KOGYO KK.
XX (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Disclosure; Page 77; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;

```

Best Local Similarity 100.0%; Pred. No. 4.3e+02; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
| | | | | | | | | | | | | | | | | | | | | |
Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 297
ID ACF79235/c
XX ACF79235 standard; DNA; 25 BP.
AC ACF79235;
XX
DT 04-DEC-2003 (first entry)
XX
DE Calix(a)arene-oligonucleotide hybrid.
XX
KW Calix(4)arene; triplex; gene therapy; DNA sensor; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT stem_loop 1..25
FT /tag= a
FT modified_base 13
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= calix(4)arene nucleoside"
XX
PN WO2003059925-A1.
XX
PD 24-JUL-2003.
XX
PF 19-JUN-2002; 2002WO-KR001160.
XX
PR 15-JAN-2002; 2002KR-00002316.
XX
PA (POST-) POSTECH FOUND.
XX
PI Kim BH, Kim SJ;
DR WPI; 2003-627375/59.
XX

XX New calix(4)arene-nucleoside hybrid useful in gene therapy has at least
PT one nucleoside attached to a calix(4)arene group through amide bonding,
PT and is derived from a calix(4)arene having amino groups.
XX
PS Claim 7; Page 20; 16pp; English.
XX

CC The present sequence is that of a calix(4)arene-oligonucleotide hybrid of
CC the invention, which includes a calix(4)arene-nucleoside (preferably
CC thymidine) derivative. The calix(4)arene-oligonucleotide hybrid functions
CC as a DNA hairpin structure mimic. It effectively recognises DNA or RNA
CC through triplex formation by bonding between the calix(4)arene-containing
CC cavity and a biologically active substance. The hybrid has a certain
CC level of both rigidity and flexibility, is stable in vivo, has high cell
CC permeability and can be mass-produced. It can be used as a DNA sensor or
CC for gene therapy
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 1 Other;

Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 96.0%; Pred. No. 4.3e+02;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
| | | | | | | | | | | | | | | | | | | | | |
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 298
AEA31163

ID AEA31163 standard; DNA; 25 BP.
XX
AC AEA31163;
XX
DT 11-AUG-2005 (first entry)
XX
DE Murine DNA oligonucleotide #10.
XX

KW Transposon; retrotransposon; genetic disorder; hemophilia;
KW Parkinsons disease; Fabry disease; hypercholesterolemia;
KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;
KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;
KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;
KW Tay Sachs disease; thalassemia; lysosomal storage disease;
KW metabolic disorder; antiparkinsonian; hemostatic; antileptic;
KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;
KW dermatological; nootropic; antisickling; ss.
XX
OS Mus sp.
XX
PN WO2005049789-A2.
XX

XX 02-JUN-2005.
XX 18-MAY-2004; 2004WO-US015810.
XX 28-MAY-2003; 2003US-0473658P.
XX (UYJO) UNIV JOHNS HOPKINS.
XX Boeke JD, Han JS;
XX WPI; 2005-396089/40.
XX

XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or
PT ORF1 gene exhibiting a higher level of expression relative to a natural
PT L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,
PT metabolic diseases.
XX
PS Example 1; SEQ ID NO 14; 66pp; English.
XX

CC The invention relates to a synthetic mammalian (retro)transposon ORF2 or
CC ORF1 gene exhibiting a higher level of expression relative to a natural
CC L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a
CC (retro)transposon comprising the synthetic gene, a mammalian L1
CC retrotransposon comprising the synthetic gene, a recombinant vector
CC construct comprising the synthetic gene, a eukaryotic cell transfected,
CC transformed or infected with the recombinant vector construct, a method
CC of delivering a desired gene, or its biologically active fragment, to the
CC cells of a mammal, a composition comprising a cassette comprising the
CC gene, a desired gene and a pharmaceutical carrier, and a method of
CC identifying an uncharacterized gene, or its biologically active fragment,
CC in cells. The composition is useful for treating a genetic disorder in a
CC mammal such as hemophilia, Parkinsons disease, Fabry disease,
CC hypercholesterolemia, Gauchers disease, cystic fibrosis,
CC adrenoleukodystrophy, disorders associated with mutations in the
CC dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin
CC deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell
CC anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and
CC metabolic disorders. The synthetic gene is useful for treating the
CC diseases. This sequence represents a murine DNA oligonucleotide used in
CC the scope of the invention.
XX
SQ Sequence 25 BP; 24 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
| | | | | | | | | | | | | | | | | | | | | |
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

```

RESULT 299
AEA31164
ID AEA31164 standard; DNA; 25 BP.
XX
AC AEA31164;
XX
DT 11-AUG-2005 (first entry)
XX
DE Murine DNA oligonucleotide #11.
XX
KW Transposon; retrotransposon; genetic disorder; hemophilia;
KW Parkinsons disease; Fabry disease; hypercholesterolemia;
KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;
KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;
KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;
KW Tay Sachs disease; thalassemia; lysosomal storage disease;
KW metabolic disorder; antiparkinsonian; hemostatic; metabolic; antilipemic;
KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;
KW dermatological; nootropic; antisickling; ss.
XX
OS Mus SP.
XX
XX WO2005049789-A2.
XX
XX 02-JUN-2005.
XX
XX 18-MAY-2004; 2004WO-US015810.
XX
XX 28-MAY-2003; 2003US-0473658P.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Boeke JD, Han JS;
XX
XX WPI; 2005-396089/40.
XX
XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,
XX metabolic diseases.
XX
XX Example 1; SEQ ID NO 15; 66pp; English.
XX
XX The invention relates to a synthetic mammalian (retro)transposon ORF2 or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a
XX (retro)transposon comprising the synthetic gene, a mammalian L1
XX retrotransposon comprising the synthetic gene, a recombinant vector
XX construct comprising the synthetic gene, a eukaryotic cell transfected,
XX transformed or infected with the recombinant vector construct, a method
XX of delivering a desired gene, or its biologically active fragment, to the
XX cells of a mammal, a composition comprising a cassette comprising the
XX gene, a desired gene and a pharmaceutical carrier, and a method of
XX identifying an uncharacterized gene, or its biologically active fragment,
XX in cells. The composition is useful for treating a genetic disorder in a
XX mammal such as hemophilia, Parkinsons disease, cystic fibrosis,
XX hypercholesterolemia, Gauchers disease, Fabry disease,
XX adrenoleukodystrophy, disorders associated with mutations in the
XX dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin
XX deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell
XX anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and
XX metabolic disorders. The synthetic gene is useful for treating the
XX diseases. This sequence represents a murine DNA oligonucleotide used in
XX the scope of the invention.
XX
XX Sequence 25 BP; 24 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;
XX Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

```

```

Db 1 AAAAAAAAAAAAAAAAAAAAAA 24
RESULT 300
AEA31162
ID AEA31162 standard; DNA; 25 BP.
XX
AC AEA31162;
XX
DT 11-AUG-2005 (first entry)
XX
DE Murine DNA oligonucleotide #9.
XX
KW Transposon; retrotransposon; genetic disorder; hemophilia;
KW Parkinsons disease; Fabry disease; hypercholesterolemia;
KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;
KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;
KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;
KW Tay Sachs disease; thalassemia; lysosomal storage disease;
KW metabolic disorder; antiparkinsonian; hemostatic; metabolic; antilipemic;
KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;
KW dermatological; nootropic; antisickling; ss.
XX
OS Mus SP.
XX
XX WO2005049789-A2.
XX
XX 02-JUN-2005.
XX
XX 18-MAY-2004; 2004WO-US015810.
XX
XX 28-MAY-2003; 2003US-0473658P.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Boeke JD, Han JS;
XX
XX WPI; 2005-396089/40.
XX
XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,
XX metabolic diseases.
XX
XX Example 1; SEQ ID NO 13; 66pp; English.
XX
XX The invention relates to a synthetic mammalian (retro)transposon ORF2 or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a
XX (retro)transposon comprising the synthetic gene, a mammalian L1
XX retrotransposon comprising the synthetic gene, a recombinant vector
XX construct comprising the synthetic gene, a eukaryotic cell transfected,
XX transformed or infected with the recombinant vector construct, a method
XX of delivering a desired gene, or its biologically active fragment, to the
XX cells of a mammal, a composition comprising a cassette comprising the
XX gene, a desired gene and a pharmaceutical carrier, and a method of
XX identifying an uncharacterized gene, or its biologically active fragment,
XX in cells. The composition is useful for treating a genetic disorder in a
XX mammal such as hemophilia, Parkinsons disease, cystic fibrosis,
XX hypercholesterolemia, Gauchers disease, Fabry disease,
XX adrenoleukodystrophy, disorders associated with mutations in the
XX dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin
XX deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell
XX anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and
XX metabolic disorders. The synthetic gene is useful for treating the
XX diseases. This sequence represents a murine DNA oligonucleotide used in
XX the scope of the invention.
XX
XX Sequence 25 BP; 24 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;
XX Best Local Similarity 100.0%; Pred. No. 4.3e+02;

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Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 301
AEC63371/c
ID AEC63371 standard; DNA; 25 BP.
XX AC AEC63371;
XX DT 03-NOV-2005 (first entry)
XX DE Oligonucleotide of the invention SEQ ID NO:1.
XX KW ss; RNA interference; antisense therapy; gene therapy.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 13
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER=cholane-3,24-diol"

KR2005023131-A.
XX PN
XX PD
XX PF 26-AUG-2003; 2003KR-00058936.
XX PR 26-AUG-2003; 2003KR-00058936.
XX PA (POST-) POSTECH FOUND.
XX PI Bang EK, Kim BH, Kim SJ;
XX WPI; 2005-588200/60.
XX PT Oligonucleotides comprising cholane-3,24-diol(3 alpha, 5 beta) unit which
XX are easily absorbed into the cells, have stable structure, and form hair-
XX pin loop structure useful in RNA interference or antisense application.
XX Claim 3; SEQ ID NO 1; 13pp; Korean.
XX PS
XX CC The invention relates to novel oligonucleotides comprising cholane-3,24-
XX diol(3alpha,5beta) unit are provided, which are easily absorbed into
XX cells, have a stable structure, and form a hair-pin loop structure, so
XX that they can be used for antisense/antigene therapy or RNAi (RNA
XX interference). The present sequence represents an oligonucleotide of the
XX invention.
XX SQ Sequence 25 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 1 Other;

Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 96.0%; Pred. No. 4.3e+02;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 302
AAA40358/c
ID AAA40358 standard; DNA; 28 BP.
XX AC AAA40358;
XX DT 10-NOV-2000 (first entry)
XX DE pBluescriptSK+ phagemid primer SEQ ID NO: 12.
XX KW Primer; cloning; ligation; ss.
XX OS Synthetic.
XX PN WO200036088-A1.
XX PD 22-JUN-2000.
XX PF 17-DEC-1999; 99WO-US030277.
XX PR 17-DEC-1999; 98US-00213834.
XX DE pBluescriptSK+ phagemid primer SEQ ID NO: 12.
XX KW Primer; cloning; ligation; ss.
XX OS Synthetic.
XX PN WO200036088-A1.
XX PD 22-JUN-2000.
XX PF 17-DEC-1999; 99WO-US030277.
XX PR 17-DEC-1999; 98US-00213834.
XX DE pBluescriptSK+ phagemid primer SEQ ID NO: 8.
XX KW Primer; cloning; ligation; ss.
XX OS Synthetic.
XX PN WO200036088-A1.
XX PD 22-JUN-2000.
XX PF 17-DEC-1999; 99WO-US030277.
XX PR 17-DEC-1999; 98US-00213834.
XX DE Inserting a nucleic acid into a circular vector comprising joining their
XX ends, melting, and reannealing ends at two different concentrations,
XX useful for cloning small amounts of nucleic acids and forming genomic
XX libraries.
XX Example 3; Page 67; 71pp; English.
XX CC This invention describes a novel method (M1) for inserting a nucleic acid
XX (N1) into a circular vector (V1) comprising joining ends of N1 and V1
XX under a first nucleic acid concentration, melting hybridized cohesive
XX circularization ends, and reannealing the ends at a second concentration.
XX The methods are useful for the cloning small amounts of nucleic acids and
XX forming genomic libraries of complex populations of DNA or cDNA. The
XX methods allow the cloning of minute amounts of nucleic acids efficiently
XX and avoids the size selection problems of prior art systems. Larger
XX nucleic acid fragments are just as easily cloned, allowing highly
XX representative libraries to be made. Vector to vector ligation is avoided
XX using the methods. AAA40351-A40366 represents primers used to illustrate
XX the method of the invention
XX SQ Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 4.5e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 28 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 303
AAA40362/c
ID AAA40362 standard; DNA; 28 BP.
XX AC AAA40362;
XX DT 10-NOV-2000 (first entry)
XX DE pBluescriptSK+ phagemid primer SEQ ID NO: 12.
XX KW Primer; cloning; ligation; ss.
XX OS Synthetic.
XX PN WO200036088-A1.
XX PD 22-JUN-2000.
XX PF 17-DEC-1999; 99WO-US030277.
XX PR 17-DEC-1999; 98US-00213834.
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PA (ROMA/) ROMANTCHIKOV Y.
XX
FI Romantchikov Y;
XX
DR WPI; 2000-442381/38.
XX
PT Inserting a nucleic acid into a circular vector comprising joining their
PT ends, melting, and reannealing ends at two different concentrations,
PT useful for cloning small amounts of nucleic acids and forming genomic
PT libraries.
XX
PS Example 4; Page 68; 7lpp; English.
XX
CC This invention describes a novel method (M1) for inserting a nucleic acid
CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
CC under a first nucleic acid concentration, melting hybridized cohesive
CC circularization ends, and reannealing the ends at a second concentration.
CC The methods are useful for the cloning small amounts of nucleic acids and
CC forming genomic libraries of complex populations of DNA or cDNA. The
CC methods allow the cloning of minute amounts of nucleic acids efficiently
CC and avoids the size selection problems of prior art systems. Larger
CC nucleic acid fragments are just as easily cloned, allowing highly
CC representative libraries to be made. Vector to vector ligation is avoided
CC using the methods. AAA40351-A40366 represents primers used to illustrate
CC the method of the invention
XX
SQ Sequence 28 BP; 0 A; 2 C; 2 G; 24 T; 0 U; 0 Other;
Query Match 0.9%; Score 24; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 4.5e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 28 AAAAAAAAAAAAAAAAAAAAAA 5
RESULT 304
AAAS7856/c
ID AAAS7856 standard; DNA; 28 BP.
XX
AC AAAS7856;
XX
DT 11-OCT-2000 (first entry)
XX
DE Deoxy-T22-tagged substrate oligonucleotide.
XX
KW Ribozyme; catalytic RNA; analyte detection; effector molecule;
KW nucleic acid substrate; in vitro selection; ribozyme ligase;
KW conformation dependent activity; allosteric activation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_RNA 23..28
FT /*tag= a
FT misc_binding 24..28
FT /*tag= b
FT /bound_moiety= "Bases 13-17 of N90 RNA pool (AAAS7851)"
XX
FN WO200024931-A2.
XX
PD 04-MAY-2000.
XX
PF 22-OCT-1999; 99WO-IL000557.
XX
PR 23-OCT-1998; 98IL-00126731.
XX
PA (INTE-) INTELLIGENE LTD.
XX
PI Nathan A, Ellington A;
XX
DR WPI; 2000-350763/30.

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XX Detecting an analyte in a sample comprises providing nucleic acid
PT sequence which is catalytically active in presence of analyte, contacting
PT catalytic nucleic acid with substrate and amplifying catalytic product.
XX
PS Disclosure; Page; 36pp; English.
XX
CC The invention relates to a method of detecting an analyte in a sample.
CC The method comprises providing a nucleic acid sequence which is initially
CC catalytically inactive, but which becomes catalytically active in the
CC presence of an analyte (the effector); providing a nucleic acid substrate
CC for the catalytic activity of the nucleic acid sequence; and contacting
CC the nucleic acid sequence and the substrate with the sample under
CC conditions allowing catalytic activity of nucleic acid sequences. The
CC catalytic nucleic acid sequence will be able to convert the nucleic acid
CC substrate into a nucleic acid product only if the analyte of interest is
CC present. The nucleic acid catalytic product is then amplified, and a
CC significant increase in the amount of product indicates the presence of
CC the analyte in the sample. The method is useful for the qualitative or
CC quantitative determination of an analyte in a sample in diagnostic
CC assays. The invention describes the in vitro selection of a ribozyme
CC ligase (L1; AAAS7859, AAAS7860) which is catalytically active only in the
CC presence of an oligonucleotide effector (AAAS7854). The L1 ribozyme
CC ligase was selected from a pool of RNA molecules comprising a central
CC randomised region 90 nucleotides in length flanked on both sides by
CC constant sequence regions (the N90 RNA pool; AAAS7851). In the presence
CC of the effector, selection was performed using one of the tagged
CC substrate molecules AAAS7855-A57857. RNAs with ligase activity (i.e.,
CC those which have become ligated to the substrate molecule) were reverse
CC transcribed using the effector oligo, and then PCR amplified using the
CC effector and a DNA primer identical in sequence to the substrate used for
CC the selection. A ribozyme ligase, L1, was selected via this procedure. L1
CC can only adopt its active conformation (AAAS7859) in the presence of the
CC effector oligo (analyte). In the absence of the effector, L1 adopts an
CC inactive conformation (AAAS7860). The present sequence represents the
CC deoxy-T22-tagged substrate oligonucleotide. The dT22 tag enables
CC successfully ligated products to be isolated using oligo(dA) cellulose
CC Type 7. Note: The present sequence is not given in the specification, but
CC is created from the information given on page 11
XX
SQ Sequence 28 BP; 1 A; 2 C; 1 G; 22 T; 2 U; 0 Other;
Query Match 0.9%; Score 23.8; DB 1; Length 28;
Best Local Similarity 92.6%; Pred. No. 4.7e+02;
Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2704 GTACTAAAAAAAAAAAAAAAAAAAAA 2730
DB 27 GTGCAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 305
AAL44903/c
ID AAL44903 standard; DNA; 29 BP.
XX
AC AAL44903;
XX
DT 05-AUG-2002 (first entry)
XX
DE Triplex forming oligonucleotide #4.
XX
KW Cancer; cytostatic; gene therapy; triplex forming oligonucleotide; ds.
XX
OS Unidentified.
XX
FN KR2001086830-A.
XX
PD 15-SEP-2001.
XX
PF 03-MAR-2000; 2000KR-00010744.
XX
DR 03-MAR-2000; 2000KR-00010744.
XX

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PA (KOCH-) KOREA CHUNGANG EDUCATIONAL FOUND.
 XX Choi JG, Lee DH, Lee GY, Park GH, Park MG, Son JW;
 PI WPI; 2002-233771/29.
 XX
 XX Novel triplex forming synthetic oligonucleotide, useful for gene therapy
 PT of tumor.
 XX
 XX Claim 4; Page 11; 13pp; Korean.
 XX
 XX The present invention relates to a triplex forming oligonucleotide which
 CC specifically binds to a specific gene. This is useful for the gene
 CC therapy of cancer by binding itself to Auger electron emitters. The
 CC present sequence is a triplex forming oligonucleotide of the invention
 XX
 XX Sequence 29 BP; 0 A; 1 C; 3 G; 25 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 23.8; DB 1; Length 29;
 Best Local Similarity 92.8%; Pred. No. 4.8e+02;
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
 ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 28 AAAAAAAAAACACAAAAAAAAAAAAAAAAA 2

RESULT 306
 AAV12482
 ID AAV12482 standard; DNA; 26 BP.
 XX
 AC AAV12482;
 XX
 XX 15-MAY-1998 (first entry)
 DT
 DE Oligonucleotide SEQ ID NO:5 from US5174320 Example 2.
 XX
 XX Synthesis; selection; amplification; circular oligonucleotide;
 KW rolling circle synthesis; diagnosis; therapeutic agent; ss.
 KW
 XX Synthetic.
 OS
 XX US5714320-A.
 PN
 XX 03-FEB-1998.
 PD
 XX 23-FEB-1995; 95US-00393439.
 PF
 XX 15-APR-1993; 93US-00047860.
 PR
 XX (UYRP) UNIV ROCHESTER.
 PA
 XX Kool ET;
 PI
 XX WPI; 1998-144278/13.
 DR
 XX Rolling circle synthesis of oligo:nucleotide(s) - using primed circular
 PT template to produce oligonucleotide multimer for cleavage.
 PT
 XX Example 2; Col 45; 38pp; English.
 PS

The present sequence represents an oligonucleotide used in an example of
 CC the present invention. The present invention describes a method for
 CC synthesizing a selected oligonucleotide (I) having well defined ends. The
 CC method comprises: (a) annealing a primer to a single-stranded (ss)
 CC circular template to yield a primed circular template, where the template
 CC comprises: (i) at least one nucleotide sequence complementary to (I); and
 CC (ii) at least one nucleotide effective to produce a cleavage site in the
 CC oligonucleotide multimer; (b) combining the primed circular template with
 CC at least two types of nucleotide triphosphates and a polymerase enzyme
 CC without the addition of auxiliary proteins to yield a ss oligonucleotide
 CC multimer complementary to the circular oligonucleotide template,
 CC comprising multiple copies of (I); and (c) cleaving the oligonucleotide

CC multimer at the cleavage site to produce (I) having well defined ends.
 CC The method is used for the large-scale synthesis of DNA and RNA oligomers
 CC for use, e.g. as probes and diagnostic agents and/or therapeutic agents
 XX
 SQ Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 23.4; DB 1; Length 26;
 Best Local Similarity 96.0%; Pred. No. 4.8e+02;
 Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 2 AAAAAAAAAACACAAAAAAAAAAAAAAAAA 26

RESULT 307
 AAV59215
 ID AAV59215 standard; DNA; 26 BP.
 XX
 AC AAV59215;
 XX
 XX 21-OCT-2004 (revised)
 DT 14-DEC-1998 (first entry)
 DE Circular template for linear oligomer dt12.
 XX
 XX ss; circular; cyclic; RNA oligonucleotide; probe; standard; diagnostic;
 KW therapeutic agent.
 KW
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH misc_binding 1
 FT /tag= a
 FT /bound_moiety= "Position 1 optionally bound to position
 26"
 FT 26
 FT misc_binding
 FT /tag= b
 FT /bound_moiety= "Position 26 optionally bound to position
 1"
 FT
 XX WO9838300-A1.
 PN
 XX 03-SEP-1998.
 PD
 XX 26-FEB-1998; 98WO-US003784.
 PF
 XX 26-FEB-1997; 97US-00805631.
 PR
 XX (UYRP) UNIV ROCHESTER.
 PA
 XX Kool ET;
 PI
 XX WPI; 1998-481202/41.
 DR
 XX Synthesis of oligo:nucleotide(s) - using a single-stranded circular
 PT oligo:nucleotide template ribonucleotide triphosphate(s) and a
 PT polymerase to form multimer(s) which can be cleaved.
 PT
 XX Example 2; Page 36; 100pp; English.
 PS

The circular template was used for the synthesis of the oligomer dt12 in
 CC an example of the method of the invention for synthesizing an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template comprising at least one copy of a nucleotide
 CC sequence complementary to the sequence of the desired RNA oligonucleotide
 CC with at least 2 types of ribonucleotide triphosphate and a polymerase
 CC enzyme to yield a single-stranded RNA oligonucleotide multimer
 CC complementary to the circular oligonucleotide template, where the RNA
 CC oligonucleotide multimer comprises multiple copies of the desired RNA
 CC oligonucleotide. The methods can be used for producing RNA
 CC oligonucleotides having a specific sequence and well defined ends. The
 CC RNA oligonucleotides produced can be used as probes, standards and

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CC diagnostic or therapeutic agents. They can be used for modifying the
CC structure or function of a target molecule. They can also be used to
CC cleave disease-associated RNA, DNA or protein
CC
CC Revised record issued on 21-OCT-2004 : Correction to feature table key
CC
CC Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
SQ
  Query Match      0.9%; Score 23.4; DB 1; Length 26;
  Best Local Similarity 96.0%; Pred. No. 4.8e+02;
  Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
    ||||||| ||||||| ||||||| |||||||
Db 2 AAAAAAAAAAACACAAAAAAAAAAAAA 26

RESULT 308
AAX30018
ID AAX30018 standard; DNA; 26 BP.
AC
AC AAX30018;
XX
XX 16-JUN-1999 (first entry)
DT
XX
XX Precircle DNA oligonucleotide SEQ ID NO:5.
DE
XX
XX Multimer; probe; diagnosis; synthesis; detection; polymerase; ss.
KW
XX
XX Synthetic.
OS
XX
XX WO9909216-A2.
PN
XX
XX 25-FEB-1999.
PD
XX
XX 13-AUG-1998; 98WO-US016776.
PF
XX
XX 13-AUG-1997; 97US-00910632.
PR
XX
XX (UYRP ) UNIV ROCHESTER.
PA
XX
XX Kool ET;
PI
XX
XX WPI; 1999-1B1062/15.
DR
XX
XX New detectably labelled oligonucleotide multimer, comprising multiple
XX contiguous copies of a repeated oligonucleotide, useful for detecting
XX target molecules in diagnosis and medicinal applications.
XX
XX Example 2; Page 41; 103pp; English.
XX
XX The present invention describes a detectably labelled oligonucleotide
XX multimer, comprising multiple contiguous copies of a repeated
XX oligonucleotide. The detectably labelled oligonucleotide multimer is
XX useful for detecting a target molecule. Oligonucleotide multimer is
XX produced in sufficient quantity to be useful for diagnostic and medical
XX applications. The multimers are useful for affinity labelling of
XX proteins, and for signal amplification in highly sensitive affinity
XX capture and sequence identification applications. The method provides a
XX faster, cheaper and simpler way for large-scale production of DNA and RNA
XX oligomers and multimers. The incorporation of labels enables the
XX oligonucleotide multimers to be useful in diagnostics and medicine. The
XX present sequence represents an oligonucleotide used in an example from
XX the present invention
SQ
  Query Match      0.9%; Score 23.4; DB 1; Length 26;
  Best Local Similarity 96.0%; Pred. No. 4.8e+02;
  Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
    ||||||| ||||||| ||||||| |||||||

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Db 2 AAAAAAAAAAACACAAAAAAAAAAAAA 26

RESULT 309
ADC65872
ID ADC65872 standard; DNA; 26 BP.
XX
XX AC ADC65872;
XX
XX 18-DEC-2003 (first entry)
DT
XX
XX DNA oligonucleotide #5.
DE
XX
XX RNA oligonucleotide synthesis; ribonucleotide triphosphate; polymerase;
XX electroporation; calcium phosphate treatment; lipid-mediated delivery;
XX cation-mediated delivery; bacterial infection; viral infection;
XX drug resistant infection; double stranded DNA oligomer; ss.
XX
XX Synthetic.
OS
XX
XX US2003087241-A1.
PN
XX
XX 08-MAY-2003.
PD
XX
XX 30-NOV-2001; 2001US-00997931.
PF
XX
XX 15-APR-1993; 93US-00047860.
PR
XX
XX 23-FEB-1995; 95US-00393439.
PR
XX
XX 26-FEB-1997; 97US-00805631.
PR
XX
XX 11-MAY-2000; 2000US-00569344.
XX
XX (UYRP ) UNIV ROCHESTER.
PA
XX
XX Kool ET;
PI
XX
XX WPI; 2003-755141/71.
DR
XX
XX Synthesizing RNA oligonucleotide involves combining single-stranded
XX circular oligonucleotide, ribonucleotide triphosphate and polymerase
XX enzyme to yield desired RNA complementary to circular oligonucleotide
XX template.
XX
XX Example 2; SEQ ID NO 5; 78pp; English.
XX
XX The invention relates to a method for synthesising an RNA
XX oligonucleotide, comprising combining a single-stranded circular
XX oligonucleotide template with at least two types of ribonucleotide
XX triphosphate and a polymerase enzyme to yield a single-stranded RNA
XX oligonucleotide multimer complementary to the circular oligonucleotide
XX template, where the RNA oligonucleotide multimer comprises multiple
XX copies of the desired RNA oligonucleotide. The method is useful for
XX synthesising an RNA oligonucleotide with well-defined ends. The circular
XX oligonucleotide is introduced into the cell using direct injection,
XX electroporation, calcium phosphate treatment, lipid-mediated delivery, or
XX cation-mediated delivery. The method is useful for treating bacterial
XX and/or viral infections in mammals, particularly drug resistant
XX infections, and for producing double-stranded DNA oligomers. The method
XX is performed in the absence of an oligonucleotide primer, or without the
XX addition of auxiliary proteins. This sequence represents an
XX oligonucleotide used in the method of the invention.
XX
XX Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
SQ
  Query Match      0.9%; Score 23.4; DB 1; Length 26;
  Best Local Similarity 96.0%; Pred. No. 4.8e+02;
  Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
    ||||||| ||||||| ||||||| |||||||
Db 2 AAAAAAAAAAACACAAAAAAAAAAAAA 26

RESULT 310

```

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ABK48140/c
ID  ABK48140 standard; DNA; 24 BP.
XX
AC
XX
ABK48140;
XX
DT  18-JUN-2002  (first entry)
XX
DE  Aspergillus niger aminopeptidase RT-PCR primer poly-T.
XX
KW  Aminopeptidase; primer; ss; food composition; dough; flavour enhancer;
KW  baked product; cheese; poly-T; reverse transcriptase PCR.
XX
OS  Synthetic.
XX
XX  WO200216618-A1.
XX
PD  28-FEB-2002.
XX
XX  22-AUG-2001; 2001WO-EP009925.
XX
PF  23-AUG-2000; 2000EP-00202995.
XX
PR  (STAM ) DSM NV.
XX
PA
XX
XX  Basten D, Dekker PJT, Schuurhuizen PW, Schaap PJ, Visser J;
XX  WPI; 2002-257917/30.
XX
PT  An isolated polypeptide with aminopeptidase activity, for preparing food
PT  compositions, such as bread and cheese, with enhanced flavoring.
XX
XX  Example 5; Page 40; 94pp; English.
XX
CC  The invention relates to an isolated polypeptide with aminopeptidase
CC  activity and the gene encoding it (including sequences complementary to
CC  the gene and which hybridise to it at high stringency), from Aspergillus
CC  niger. Also included are a nucleic acid construct comprising the above
CC  polynucleotide operably linked to one or more control sequences that
CC  direct the production of the polypeptide in a suitable expression host, a
CC  recombinant expression vector comprising the above nucleic acid
CC  construct, a recombinant host cell comprising the above construct or
CC  vector, and producing the protein comprising cultivating an above strain/
CC  recombinant host cell to produce a supernatant and/or cells comprising
CC  the polypeptide and recovering the polypeptide. The aminopeptidase is
CC  used to prepare a food composition such as dough to enhance the flavour
CC  of a baked product from the dough and for preparing a cheese to enhance
CC  the flavour. The invention provides a bacterial enzyme for protein
CC  hydrolysis i.e. with aminopeptidase activity, to produce flavouring
CC  agents, and the enzyme has been isolated and characterised, compared to a
CC  previously observed weak aminopeptidase activity which was detected in an
CC  Aspergillus niger culture filtrate but the source was never isolated or
CC  identified. The use of enzymes to produce flavouring agents from
CC  proteinaceous material is better than use of strong acids which can
CC  severely degrade the amino acids obtained. The present sequence is a
CC  reverse transcriptase (RT)-PCR primer used to investigate the intron-exon
CC  structure of the aminopeptidase gene
XX
SQ  Sequence 24 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 1 Other;

Query Match      0.8%; Score 23.2; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. NO. 4.7e+02;
Matches 23; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY  2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2731
    :|||||
Db  24 BAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 311
AEB90558/c
ID  AEB90558 standard; DNA; 25 BP.
XX
AC
XX  AEB90558;
XX
XX  20-OCT-2005  (first entry)
XX
XX  Thielavia terrestris NRRL 8126 cDNA library primer SEQ ID NO 43.
XX
KW  detergent; degradation; cellulose; glycolysis; NRRL 8126; PCR; primer;
KW  ss; cDNA library.
XX
OS  Escherichia coli.
XX
XX  WO2005074647-A2.
XX
XX  18-AUG-2005.
XX
XX  28-JAN-2005; 2005WO-US003525.
XX
PR  30-JAN-2004; 2004US-0540661P.
XX
XX  (NOVO ) NOVOZYMES INC.
XX
XX  Brown K, Harris P, Zaretsky E, Re E, Vlasenko E, McFarland K;
XX  Lopez De Leon A;
XX  WPI; 2005-555779/56.
XX
XX  New polypeptide having cellulolytic enhancing activity, useful for
XX  degrading or converting biomass to sugars and for producing organic
XX  substance and detergent composition.
XX
XX  Example 11; SEQ ID NO 43; 219pp; English.
XX
CC  The invention describes an isolated polypeptide (I) having cellulolytic
CC  enhancing activity. Also described are: producing a polynucleotide having
CC  a mutant nucleotide sequence; an isolated polynucleotide comprising a
CC  nucleotide sequence which encodes (I) or a mutant polynucleotide produced
CC  by the method of (1); a nucleic acid construct comprising the
CC  polynucleotide operably linked to one or more control sequences that
CC  direct the production of the polypeptide in an expression host or a
CC  nucleic acid construct comprising a gene encoding a protein operably
CC  linked to a nucleotide sequence encoding a signal peptide consisting of
CC  nucleotides 330-387 of SEQ ID NO: 1, nucleotides 47-97 of SEQ ID NO: 3,
CC  nucleotides 69-125 of SEQ ID NO: 5, nucleotides 1-54 of SEQ ID NO: 7, or
CC  nucleotides 1-57 of SEQ ID NO: 9, where the gene is foreign to the
CC  nucleotide sequence; a recombinant expression vector comprising the
CC  nucleic acid construct of (3); a recombinant host cell comprising the
CC  nucleic acid construct of (3); producing (I); producing a mutant of a
CC  parent cell; a mutant cell produced by the method of (7); producing a
CC  protein; a transgenic plant, plant part or plant cell, which has been
CC  transformed with a polynucleotide encoding (I); a detergent composition
CC  comprising the polypeptide having cellulolytic enhancing activity, a
CC  cellulolytic activity, and a surfactant; degrading or converting a
CC  cellulosic material; and producing an organic substance. (I) is a
CC  polypeptide having cellulolytic enhancing activity comprising a sequence
CC  of 326, 478, 516, 452, or 608 amino acids (EVEN SEQ ID NOS: 2-10) encoded
CC  by a polynucleotide comprising a nucleotide sequence of 1846, 880, 1000,
CC  881, or 960 bp (ODD SEQ ID NOS: 1-9). The polypeptide, polynucleotide,
CC  and methods are useful for degrading or converting biomass to sugars, for
CC  producing an organic substance, and for producing detergent composition.
CC  This sequence represents a primer used in the creation of a Thielavia
CC  terrestris NRRL 8126 cDNA library for the isolation of cellulolysis
CC  enhancing proteins.
XX
SQ  Sequence 25 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 2 Other;

Query Match      0.8%; Score 23.2; DB 1; Length 25;
Best Local Similarity 95.8%; Pred. NO. 4.8e+02;
Matches 23; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY  2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2731
    :|||||
Db  24 BAAAAAAAAAAAAAAAAAAAAAAAAA 1

AEB90558/c
ID  AEB90558 standard; DNA; 25 BP.
XX
AC
XX  AEB90558;
XX
XX  20-OCT-2005  (first entry)
XX
XX  Thielavia terrestris NRRL 8126 cDNA library primer SEQ ID NO 43.
XX
KW  detergent; degradation; cellulose; glycolysis; NRRL 8126; PCR; primer;
KW  ss; cDNA library.
XX
OS  Escherichia coli.
XX
XX  WO2005074647-A2.
XX
XX  18-AUG-2005.
XX
XX  28-JAN-2005; 2005WO-US003525.
XX
PR  30-JAN-2004; 2004US-0540661P.
XX
XX  (NOVO ) NOVOZYMES INC.
XX
XX  Brown K, Harris P, Zaretsky E, Re E, Vlasenko E, McFarland K;
XX  Lopez De Leon A;
XX  WPI; 2005-555779/56.
XX
XX  New polypeptide having cellulolytic enhancing activity, useful for
XX  degrading or converting biomass to sugars and for producing organic
XX  substance and detergent composition.
XX
XX  Example 11; SEQ ID NO 43; 219pp; English.
XX
CC  The invention describes an isolated polypeptide (I) having cellulolytic
CC  enhancing activity. Also described are: producing a polynucleotide having
CC  a mutant nucleotide sequence; an isolated polynucleotide comprising a
CC  nucleotide sequence which encodes (I) or a mutant polynucleotide produced
CC  by the method of (1); a nucleic acid construct comprising the
CC  polynucleotide operably linked to one or more control sequences that
CC  direct the production of the polypeptide in an expression host or a
CC  nucleic acid construct comprising a gene encoding a protein operably
CC  linked to a nucleotide sequence encoding a signal peptide consisting of
CC  nucleotides 330-387 of SEQ ID NO: 1, nucleotides 47-97 of SEQ ID NO: 3,
CC  nucleotides 69-125 of SEQ ID NO: 5, nucleotides 1-54 of SEQ ID NO: 7, or
CC  nucleotides 1-57 of SEQ ID NO: 9, where the gene is foreign to the
CC  nucleotide sequence; a recombinant expression vector comprising the
CC  nucleic acid construct of (3); a recombinant host cell comprising the
CC  nucleic acid construct of (3); producing (I); producing a mutant of a
CC  parent cell; a mutant cell produced by the method of (7); producing a
CC  protein; a transgenic plant, plant part or plant cell, which has been
CC  transformed with a polynucleotide encoding (I); a detergent composition
CC  comprising the polypeptide having cellulolytic enhancing activity, a
CC  cellulolytic activity, and a surfactant; degrading or converting a
CC  cellulosic material; and producing an organic substance. (I) is a
CC  polypeptide having cellulolytic enhancing activity comprising a sequence
CC  of 326, 478, 516, 452, or 608 amino acids (EVEN SEQ ID NOS: 2-10) encoded
CC  by a polynucleotide comprising a nucleotide sequence of 1846, 880, 1000,
CC  881, or 960 bp (ODD SEQ ID NOS: 1-9). The polypeptide, polynucleotide,
CC  and methods are useful for degrading or converting biomass to sugars, for
CC  producing an organic substance, and for producing detergent composition.
CC  This sequence represents a primer used in the creation of a Thielavia
CC  terrestris NRRL 8126 cDNA library for the isolation of cellulolysis
CC  enhancing proteins.
XX
SQ  Sequence 25 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 2 Other;

Query Match      0.8%; Score 23.2; DB 1; Length 25;
Best Local Similarity 95.8%; Pred. NO. 4.8e+02;
Matches 23; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY  2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2731
    :|||||
Db  24 BAAAAAAAAAAAAAAAAAAAAAAAAA 1

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RESULT 312
ADG76060/c
ID   ADG76060 standard; DNA; 28 BP.
XX
AC   ADG76060;
XX
XX   11-MAR-2004 (first entry)
DT
XX
DE   Non-CpG DNA oligonucleotide 61.
XX
XX   ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX   Synthetic.
OS
XX
XX   WO2003101375-A2.
PN
XX
XX   11-DEC-2003.
PD
XX
XX   30-MAY-2003; 2003WO-EP005691.
PF
XX
XX   30-MAY-2002; 2002CA-02388049.
PR
XX
XX   (IMMU-) IMMUNOTECH SA.
PA
XX   Lopez RA;
PI
XX   WPI; 2004-053333/05.
DR
XX
XX   New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX   Example 17; Page 82; 139pp; English.
XX
XX   This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
CC invention.
XX
XX   Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 23.2; DB 1; Length 28;
Best Local Similarity 89.3%; Pred. No. 5.1e+02;
Matches 25; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2736
Db 28 AAAAAAAAAAAAAAAAAACCAAAATGAAAA 1

RESULT 313
ADG75972/c
ID   ADG75972 standard; DNA; 28 BP.
XX
XX   ADG75972;
AC
XX   11-MAR-2004 (first entry)
DT
XX

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```

XX
DE   Immunostimulatory non-CpG phosphorothioate DNA oligo IMT191.
XX
KW   ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX   Synthetic.
OS
XX
XX   WO2003101375-A2.
PN
XX
XX   11-DEC-2003.
PD
XX
XX   30-MAY-2003; 2003WO-EP005691.
PF
XX
XX   30-MAY-2002; 2002CA-02388049.
PR
XX
XX   (IMMU-) IMMUNOTECH SA.
PA
XX   Lopez RA;
PI
XX   WPI; 2004-053333/05.
DR
XX
XX   New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX   Example 5; Page 70; 139pp; English.
XX
XX   This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory
CC phosphorothioate non-CpG variant DNA oligo, used to determine the effect
CC of oligo size on B cell proliferation and IL6 secretion in an
CC exemplification of the invention. NOTE: This sequence is referred to as
CC SeqID 77 in example 5 of the specification, this differs from that given
CC as SeqID 77 in claim 14.
XX
XX   Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 23.2; DB 1; Length 28;
Best Local Similarity 89.3%; Pred. No. 5.1e+02;
Matches 25; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2736
Db 28 AAAAAAAAAAAAAAAAAACCAAAATGAAAA 1

RESULT 314
AAC62450/c
ID   AAC62450 standard; DNA; 23 BP.
XX
XX   AAC62450;
AC
XX   07-FEB-2001 (first entry)
DT
XX
XX   Cleavage of nucleic acids from solid supports assay oligonucleotide #1.
DE
XX

```

KW Nucleic acid cleavage; solid support; DNA-RNA hybrid;
KW affinity chromatography; sequencing; mutagenesis; DNA preparation;
KW nucleic acid purification; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT misc_RNA 23 /*tag= a
FT FT
XX WO200058329-A1.
XX 05-OCT-2000.
XX 28-MAR-2000; 2000WO-GB001190.
XX 29-MAR-1999; 99GB-00007245.
XX (GOLD/) GOLDSBOROUGH A.
XX WPI; 2000-664908/64.
XX Detaching nucleic acid molecule comprising unconventional nucleotide
PT incorporated at predetermined site from a solid support involves cleaving
PT the nucleic acid molecule at the site of unconventional nucleotide.
XX Disclosure; Page 16; 47pp; English.
XX The present invention is concerned with the cleavage of nucleic acids
CC from solid supports. This is carried out by adding a non-conventional
CC nucleotide into the nucleic acid attached to the support, so that it is
CC recognised and cleaved by a specific DNA glycosylase and the sequence is
CC released. This is useful in many molecular biological procedures such as
CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
CC based assays, mutagenesis procedures, nucleic acid purification and
CC affinity chromatography. The present sequence is an oligonucleotide used
CC in assays to demonstrate the methods of the invention
XX Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 1 U; 0 Other;
SQ
Query Match 0.8%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 315
AAC62451/C
ID AAC62451 standard; RNA; 23 BP.
AC AAC62451;
XX 07-FEB-2001 (first entry)
XX Cleavage of nucleic acids from solid supports assay oligonucleotide #2.
DE Nucleic acid cleavage; solid support; affinity chromatography;
XX sequencing; mutagenesis; DNA preparation; nucleic acid purification; ss.
KW Synthetic.
OS WO200058329-A1.
XX 05-OCT-2000.
XX 28-MAR-2000; 2000WO-GB001190.
XX 29-MAR-1999; 99GB-00007245.
XX (GOLD/) GOLDSBOROUGH A.

KW Nucleic acid cleavage; solid support; DNA-RNA hybrid;
KW affinity chromatography; sequencing; mutagenesis; DNA preparation;
KW nucleic acid purification; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT misc_RNA 23 /*tag= a
FT FT
XX WO200058329-A1.
XX 05-OCT-2000.
XX 28-MAR-2000; 2000WO-GB001190.
XX 29-MAR-1999; 99GB-00007245.
XX (GOLD/) GOLDSBOROUGH A.
XX WPI; 2000-664908/64.
XX Detaching nucleic acid molecule comprising unconventional nucleotide
PT incorporated at predetermined site from a solid support involves cleaving
PT the nucleic acid molecule at the site of unconventional nucleotide.
XX Disclosure; Page 16; 47pp; English.
XX The present invention is concerned with the cleavage of nucleic acids
CC from solid supports. This is carried out by adding a non-conventional
CC nucleotide into the nucleic acid attached to the support, so that it is
CC recognised and cleaved by a specific DNA glycosylase and the sequence is
CC released. This is useful in many molecular biological procedures such as
CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
CC based assays, mutagenesis procedures, nucleic acid purification and
CC affinity chromatography. The present sequence is an oligonucleotide used
CC in assays to demonstrate the methods of the invention
XX Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 1 U; 0 Other;
SQ
Query Match 0.8%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 315
AAC62451/C
ID AAC62451 standard; RNA; 23 BP.
AC AAC62451;
XX 07-FEB-2001 (first entry)
XX Cleavage of nucleic acids from solid supports assay oligonucleotide #2.
DE Nucleic acid cleavage; solid support; affinity chromatography;
XX sequencing; mutagenesis; DNA preparation; nucleic acid purification; ss.
KW Synthetic.
OS WO200058329-A1.
XX 05-OCT-2000.
XX 28-MAR-2000; 2000WO-GB001190.
XX 29-MAR-1999; 99GB-00007245.
XX (GOLD/) GOLDSBOROUGH A.

XX WPI; 2000-664908/64.
DR Detaching nucleic acid molecule comprising unconventional nucleotide
XX incorporated at predetermined site from a solid support involves cleaving
PT the nucleic acid molecule at the site of unconventional nucleotide.
PT Example 1; Page 32; 47pp; English.
XX The present invention is concerned with the cleavage of nucleic acids
XX from solid supports. This is carried out by adding a non-conventional
CC nucleotide into the nucleic acid attached to the support, so that it is
CC recognised and cleaved by a specific DNA glycosylase and the sequence is
CC released. This is useful in many molecular biological procedures such as
CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
CC based assays, mutagenesis procedures, nucleic acid purification and
CC affinity chromatography. The present sequence is an oligonucleotide used
CC in assays to demonstrate the methods of the invention
XX Sequence 23 BP; 0 A; 0 C; 0 G; 0 T; 23 U; 0 Other;
SQ
Query Match 0.8%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 316
ADT55093
ID ADT55093 standard; DNA; 23 BP.
XX AC ADT55093;
XX 13-JAN-2005 (first entry)
DT Electrophoresis apparatus-related DNA sequence #1.
XX Electrophoresis apparatus; variant gene isolation;
XX gene mutation detection; variant gene detection;
KW single nucleotide polymorphism analysis; SNP detection; ds.
XX Unidentified.
OS JP2004298001-A.
XX 28-OCT-2004.
XX 28-MAR-2003; 2003JP-00091194.
XX 28-MAR-2003; 2003JP-00091194.
XX (WATU) MATSUSHITA DENKI SANGYO KK.
XX WPI; 2004-760825/75.
DR Electrophoresis apparatus useful for isolating variant gene, comprises
XX heating apparatus, and sealed flow path comprising linear polymer and DNA
PT joint controlling agent, with DNA conjugates for separation, purification
PT and assay.
XX Disclosure; Fig 1; 21pp; Japanese.
XX The invention comprises an electrophoresis apparatus for isolating
XX variant genes. The apparatus consists of: a sealed flow path filled with
CC buffer containing linear polymer and DNA joint controlling agent, and
CC containing DNA conjugate for separation, DNA conjugate for purification,
CC and DNA conjugate for assay; and a heating apparatus for heating the
CC portion of sealed flow path in which the DNA conjugate for assay is
CC fixed. The electrophoresis apparatus is useful for isolating a variant
CC gene. The electrophoresis apparatus is also useful in gene diagnosis for

CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.

XX Sequence 23 BP; 23 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 4.7e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 317
 ADT55098/c
 ID ADT55098 standard; DNA; 23 BP.
 XX
 AC ADT55098;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Electrophoresis apparatus-related DNA sequence #6.
 XX
 KW electrophoresis apparatus; variant gene isolation;
 KW gene mutation detection; variant gene detection;
 KW single nucleotide polymorphism analysis; SNP detection; ss.
 XX
 OS Unidentified.

XX JP2004298001-A.
 XX
 XX 28-OCT-2004.
 XX
 PF 28-MAR-2003; 2003JP-00091194.
 XX
 PR 28-MAR-2003; 2003JP-00091194.
 XX
 PA (MATU) MATSUSHITA DENKI SANGYO KK.
 XX
 XX WPI; 2004-760825/75.

XX Electrophoresis apparatus useful for isolating variant gene, comprises
 PT heating apparatus, and sealed flow path comprising linear polymer and DNA
 PT joint controlling agent, with DNA conjugates for separation, purification
 PT and assay.

XX Disclosure; Fig 4; 2lpp; Japanese.

XX The invention comprises an electrophoresis apparatus for isolating
 CC variant genes. The apparatus consists of: a sealed flow path filled with
 CC buffer containing linear polymer and DNA joint controlling agent, and
 CC containing DNA conjugate for separation, DNA conjugate for purification,
 CC and DNA conjugate for assay; and a heating apparatus for heating the
 CC portion of sealed flow path in which the DNA conjugate for assay is
 CC fixed. The electrophoresis apparatus is useful for isolating a variant
 CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
 CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.

XX Sequence 23 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 4.7e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 318
 ADG16129/c
 ID ADG16129 standard; DNA; 24 BP.
 XX
 AC ADG16129;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Compound activity characterisation-related oligonucleotide SeqID4.
 XX
 KW compound activity characterisation; cellular activity;
 KW phenotypic attribute; candidate medicine; candidate treatment;
 KW multiple biological descriptor; cell marker; ss.
 XX
 OS Unidentified.

XX WO200181895-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 24-APR-2001; 2001WO-US013248.
 XX
 PR 26-APR-2000; 2000US-0199778P.
 PR 20-FEB-2001; 2001US-00790214.
 XX
 PA (CYTO-) CYTOKINETICS INC.
 XX
 PI Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
 XX
 DR WPI; 2002-041423/05.

XX Characterizing cellular activity of compound, by receiving images of
 PT cells with known activity and images of cells treated with compound,
 PT characterizing phenotypic attributes of images and comparing the
 PT phenotypes.

XX Disclosure; Fig 18; 139pp; English.

XX This invention relates to a novel method for the characterisation of the
 CC activity of a compound on cell. The method involves receiving images of
 CC cells with a cellular activity and images of other cells treated with the
 CC compound, quantitatively characterising phenotypic attributes of the
 CC image of cells with a cellular activity to produce a target phenotype for
 CC the cellular activity and that of the image of other cells to produce a
 CC second phenotype for the compound, and comparing the two phenotypes to
 CC determine whether the compound possesses cellular activity. The invention
 CC may be useful for characterising cellular activity of a compound, for
 CC determining information about properties of substances based upon the
 CC information about structure of living or non-living cells exposed to
 CC substances. The invention is also useful for identifying promising
 CC candidates in a search for new and better medicines and treatments using
 CC multiple biological descriptors from a single cell markers or components.

XX Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 319
 ABX79809/c
 ID ABX79809 standard; cDNA; 24 BP.
 XX
 AC ABX79809;
 XX
 DT 17-APR-2003 (first entry)
 XX
 DE EST polymorphic DNA repeat polynucleotide #134.


```

XX PR 15-OCT-1999; 99US-0160096P.
XX PA (ORCH-) ORCHID BIOSCIENCES INC.
XX PI Picoult-Newburg L, Pohl M;
XX DR WPI; 2001-290930/30.
XX PT New genotyping oligonucleotide, useful for detecting the presence,
XX PT absence or identity of single polynucleotide polymorphism in a nucleic
XX PT acid sample.
XX PS Claim 1; Page 56; 83pp; English.
XX CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX CC primer extension (SNPE) primers, and the sequences of regions flanking
XX CC sites of single nucleotide polymorphisms SNPs. The present invention
XX CC includes kits for determining the presence or absence of a SNP, using the
XX CC oligonucleotides of the invention. The PCR primers are used to amplify a
XX CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX CC The oligonucleotides are useful for genotyping a nucleic acid sample by
XX CC performing a single-nucleotide primer extension reaction. The
XX CC oligonucleotides are useful for determining the presence, absence or
XX CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX CC assess by association analysis the genotype of an individual or group of
XX CC individuals, having a pathological phenotypic trait suspected of being
XX CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX CC traits also include symptoms of or susceptibility to multifactorial
XX CC disease of which a component is or may be genetic such as autoimmune
XX CC diseases, including, rheumatoid arthritis, multiple sclerosis,
XX CC inflammation, cancer, nervous system diseases and infection by pathogenic
XX CC microorganism. The method is also useful in forensic investigations and
XX CC paternity analysis. The present sequence represents a single nucleotide
XX CC primer extension (SNPE) primer specific for a human SNP containing DNA
XX CC sequence
XX SQ Sequence 25 BP; 1 A; 1 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 25 AAAAAAAAAAAAAAAAAAAAAA 3

RESULT 322
AAS11744
ID AAS11744 standard; DNA; 28 BP.
AC AAS11744;
XX
XX 24-OCT-2001 (first entry)
XX
XX Human haemoglobin alpha 2 transcript (extreme 3' end).
XX
XX Peptide-based cDNA characterisation; haemoglobin alpha 2; human; ds.
XX
XX Homo sapiens.
XX
XX WC200161051-A1.
XX
XX 23-AUG-2001.
XX
XX 16-FEB-2001; 2001WO-US005305.
XX
XX 16-FEB-2000; 2000US-0182983P.
XX
XX

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PA (SEQU-) SEQUEL GENETICS INC.
XX Jarvik JW;
XX WPI; 2001-514778/56.
XX Transcript, genetic, and especially nucleic acid sequence analysis
XX PT comprises analysis of hybrid peptide products.
XX PS Example 11; Page 30; 48pp; English.
XX
XX The invention relates to a method of peptide-based transcript or genetic
XX CC analysis comprising: (a) providing multiple polynucleotides (I) derived
XX CC from mRNAs from a biological sample, where (I) has homology to a known
XX CC reference sequence (II); (b) expressing (I); and (c) assessing a physical
XX CC property of the expression products to determine the sequences of (I) by
XX CC comparison with the predicted properties of polypeptides encoded by (II).
XX CC The method is useful for transcript or genetic analysis, especially
XX CC nucleic acid analysis where the method comprises expressing polypeptides
XX CC from two or more reading frames and determining the masses to create a
XX CC peptide mass signature characteristic of the nucleic acid molecule. The
XX CC peptide is considerably smaller than the DNA molecule that encodes it
XX CC (individual amino acids averages about 110 Daltons each whereas the
XX CC trinucleotides (triplets) that encode them average N Daltons each). Also,
XX CC the peptides are much more diverse in composition than nucleic acids, as
XX CC they are composed of combinations of 20 different amino acids instead of
XX CC combinations of 4 different nucleotides, e.g., two random DNA fragments
XX CC of identical composition (e.g., with 10 adenines, 10 thymines, 15
XX CC guanines, and 15 cytosines) are extremely unlikely to encode peptides of
XX CC identical composition. This means that whereas the two nucleic acids have
XX CC identical masses and cannot be distinguished on the basis of mass, the
XX CC peptides that they encode will, except in statistically very rare cases,
XX CC have different masses and can be readily distinguished in the basis of
XX CC mass. The present sequence represents the coding sequence of human
XX CC haemoglobin alpha 2 transcript (extreme 3' end) used in an example to
XX CC demonstrate the method of the invention
XX SQ Sequence 28 BP; 23 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 6 AAAAAAAAAAAAAAAAAAAAAA 28

RESULT 323
AAT93819/C
ID AAT93819 standard; DNA; 26 BP.
XX
XX AAT93819;
XX
XX 25-MAR-2003 (revised)
XX 24-FEB-1998 (first entry)
XX
XX Antitumoural phosphodiester oligonucleotide 9 with cytotoxic activity.
XX
XX Phosphodiester; selective binding; cell viability; growth;
XX tumoural cell line; cytotoxic activity; tumour cell; lymphoma;
XX lymphoblastic tumour; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..26
XX /*tag= a
XX /note= "phosphodiester oligonucleotide"
XX
XX WO9720924-A1.
XX
XX 12-JUN-1997.

```

XX PF 04-DEC-1996; 96WO-EP005388.
XX PR 04-DEC-1995; 95IT-MI002539.
XX PA (SAIC-) SAICOM SRL.
XX PI Scaggiante B, Quadrioglio F;
XX WPI; 1997-319771/29.
XX
XX New phosphodiesteric oligonucleotide(s) - which exert a specific and
XX selective cytotoxic effect on tumour cells, for treating both solid and
XX liquid tumours.
XX
XX Claim 10; Page 5; 38pp; English.
XX
XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the
XX generic formula, in the 3'-5' or 5'-3' direction: (Gata')a''-(Gbtb')b''-
XX (Gctc')c''-(Gdrd')d''-(Gffe')f''-(Ggtg')g''-N', where: N and
XX N' = T or G, equal or different from each other; x = 0-8, equal or
XX different from each other; a, b, c, d, e, f, and g = 0-10, equal or
XX different from each other; a', b', c', d', e', f', and g' = 0-30, equal
XX or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-
XX 16, equal or different from each other; The oligonucleotides are believed
XX to selectively bind and sequester some proteins which are essential to
XX the viability and growth of tumoural cell line. They have specific and
XX selective cytotoxic activity against tumour cells, and can be used for
XX treating tumours of the liquid type, in particular of lymphoblastic
XX origin, and of solid type, in particular lymphomas. The present
XX phosphodiester oligonucleotide, at a concentration of 15 micromolar,
XX reduced growth of CCRF-CEM tumoural cells by 76%, which is detectable 48
XX hours after administration. (Updated on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 26 BP; 0 A; 0 C; 2 G; 24 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 22.8; DB 1; Length 26;
Best Local Similarity 92.3%; Pred. NO. 5.2e+02;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAACAAAAAAAAA 1
RESULT 324
ADG16126/c
ID ADG16126 standard; DNA; 24 BP.
XX AC ADG16126;
XX
XX 26-FEB-2004 (first entry)
XX
XX Compound activity characterisation-related oligonucleotide SeqID1.
XX
XX compound activity characterisation; cellular activity;
XX phenotypic attribute; candidate medicine; candidate treatment;
XX multiple biological descriptor; cell marker; ss.
XX
XX Unidentified.
XX
XX WO200181895-A2.
XX
XX 01-NOV-2001.
XX
XX 24-APR-2001; 2001WO-US013248.
XX
XX 26-APR-2000; 2000US-0199778P.
XX 20-FEB-2001; 2001US-00790214.
XX
XX (CYTO-) CYTOKINETICS INC.
XX
XX Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
XX

XX WPI; 2002-041423/05.
XX
XX Characterizing cellular activity of compound, by receiving images of
XX cells with known activity and images of cells treated with compound,
XX characterizing phenotypic attributes of images and comparing the
XX phenotypes.
XX
XX Disclosure; Fig 18; 139pp; English.
XX
XX This invention relates to a novel method for the characterisation of the
XX activity of a compound on cell. The method involves receiving images of
XX cells with a cellular activity and images of other cells treated with the
XX compound, quantitatively characterising phenotypic attributes of the
XX image of cells with a cellular activity to produce a target phenotype for
XX the cellular activity and that of the image of other cells to produce a
XX second phenotype for the compound, and comparing the two phenotypes to
XX determine whether the compound possesses cellular activity. The invention
XX may be useful for characterising cellular activity of a compound, for
XX determining information about properties of substances based upon the
XX information about structure of living or non-living cells exposed to
XX substances. The invention is also useful for identifying promising
XX candidates in a search for new and better medicines and treatments using
XX multiple biological descriptors from a single cell markers or components.
XX
XX Sequence 24 BP; 1 A; 0 C; 0 G; 23 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. NO. 5.3e+02;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2729
DB 24 AATAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 325
AED81269/c
ID AED81269 standard; DNA; 24 BP.
XX AC AED81269;
XX
XX 26-JAN-2006 (first entry)
XX
XX IL-10 expression assay, test oligonucleotide SEQ ID NO:27.
XX
XX pharmaceutical; therapeutic; immune stimulation; immune response;
XX allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX immunosuppressive; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO2005111057-A2.
XX
XX 24-NOV-2005.
XX
XX 04-APR-2005; 2005WO-US011827.
XX
XX 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Vollmer J;
XX
XX WPI; 2005-786756/80.
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
XX autoimmune disease, arthritis, systemic lupus erythematosus, multiple
XX sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 27; 111pp; English.
XX


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XX OS Mus sp.
XX PN WO2003084565-A2.
XX PD 16-OCT-2003.
XX XX
XX PF 08-APR-2003; 2003WO-EP003645.
XX XX
XX PR 08-APR-2002; 2002EP-00007837.
XX XX
XX PA (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX XX
XX PI Nawroth R, Deutsch U, Vestweber D, Shima DT, Golding M;
XX XX
XX DR WPI; 2003-804251/75.
XX XX
XX PT Use of the polypeptide comprising vascular endothelial-protein tyrosine
XX PT phosphatase (VE-PTP) or the nucleic acid encoding the polypeptide for the
XX FT manufacture of an agent for monitoring or modulating VE-cadherin mediated
XX FT disorders.
XX XX
XX PS Example; Page 17; Opp; English.
XX XX
XX CC The present invention relates to a polypeptide comprising vascular
XX CC endothelial-protein tyrosine phosphatase (VE-PTP) or its active fragment
XX CC or effector, or the nucleic acid encoding the polypeptide or its
XX CC effector, for use in the manufacture of an agent for monitoring or
XX CC modulating VE-cadherin mediated processes or disorders. The polypeptide
XX CC comprising vascular endothelial-protein tyrosine phosphatase (VE-PTP) or
XX CC its active fragment or effector, or the nucleic acid encoding the
XX CC polypeptide or its effector, is useful for the manufacture of an agent
XX CC for monitoring or modulating VE-cadherin mediated processes or disorders,
XX CC e.g., cancer. The present sequence is a PCR primer shown in the
XX CC exemplification of the invention
XX XX
XX SQ Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 1 Other;
XX XX
XX Query Match 0.8%; Score 22.2; DB 1; Length 23;
XX Best Local Similarity 95.7%; Pred. No. 5.3e+02;
XX Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2730
DB 23 BAAAAAAAAAAAAAAAAAAAAA 1
XX XX
RESULT 328
AAQ64724
ID AAQ64724 standard; cDNA to mRNA; 22 BP.
XX AC AAQ64724;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 04-JAN-1995 (first entry)
XX XX
XX DE 2',5'-linked tetraadenylate-anti(dT)18 oligonucleotide chimeric mol.
XX XX
XX KW antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
XX KW RNA cleavage; antiviral therapy; chimeric molecule; PKR;
XX KW protein synthesis regulation; phosphorylation; eIF-2alpha;
XX KW eukaryotic translation initiation factor; ss.
XX XX
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT misc_feature 1..4
XX FT /tag= a
XX FT /label= 2',5'-linked tetraadenylate
XX FT /notes= "nucleotides linked through phosphodiester bonds
XX FT at hydroxyl groups of 2' and 5' carbons"
XX FT 4..5
XX FT misc_feature
XX FT /tag= b

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FT /note= "the 2-5A moiety (*tag = a) and the antisense DNA
FT sequence (*tag = c) are linked by two 1,4-butanediol
FT molecules linked through phosphodiester bonds"
FT 5..22
FT /tag= c
FT /note= "antisense region, complementary to oligo dT"
XX XX
XX PN WO9409129-A2.
XX XX
XX PD 28-APR-1994.
XX XX
XX PF 20-OCT-1993; 93WO-US010103.
XX XX
XX PR 21-OCT-1992; 92US-00965666.
XX PR 17-SEP-1993; 93US-00123449.
XX XX
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX PA (CLEV-) CLEVELAND CLINIC RES INST.
XX XX
XX PI Torrence P, Silverman R, Maitra R, Lesiak K;
XX XX
XX DR WPI; 1994-151315/18.
XX XX
XX PT Specific cleavage of RNA, useful partic. for treating viral infection,
XX PT cancers, etc. - by using anti-sense oligo:nucleotide coupled to activator
XX PT of 2-5A dependent RNase.
XX PS Example 9; Page 66; 86pp; English.
XX XX
XX CC This sequence was used to determine whether 2-5A-antisense chimeric
XX CC molecules are inhibitory to cell growth. The molecules AAQ64709, AAQ64711
XX CC and AAQ64724 all lacked cytotoxicity. In the novel 2-5A-antisense
XX CC oligonucleotide chimeric molecules, the antisense region targets the
XX CC chimeric molecule to a particular region of RNA to be specifically
XX CC cleaved and the 2',5'-linked tetraadenylate tail activates the 2-5A
XX CC RNase. Typical applications are treatment of viral infections (esp. for
XX CC cleavage of an RNA virus genome), cancer; leukaemia, cardiovascular
XX CC disorders (e.g. restenosis after angioplasty), genetic disorders,
XX CC osteoarthritis or rheumatoid arthritis. (Updated on 25-MAR-2003 to
XX CC correct FN field.)
XX XX
XX SQ Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX XX
XX Query Match 0.8%; Score 22; DB 1; Length 22;
XX Best Local Similarity 100.0%; Pred. No. 5.4e+02;
XX Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 1 AAAAAAAAAAAAAAAAAAAAAA 22
XX XX
RESULT 329
AAF17413
ID AAF17413 standard; DNA; 22 BP.
XX XX
XX AC AAF17413;
XX XX
XX DT 09-MAR-2001 (first entry)
XX XX
XX DE L1 cleavage site related sequence #3.
XX XX
XX KW Retrotransposon; genetic defect; cystic fibrosis; da.
XX XX
XX OS Unidentified.
XX XX
XX PN US6150160-A.
XX XX
XX PD 21-NOV-2000.
XX XX
XX PF 28-APR-1997; 97US-00847844.
XX XX
XX PR 16-NOV-1995; 95US-0006831P.

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PR 15-NOV-1996; 96US-00749805.
PA (UYJO ) UNIV JOHNS HOPKINS.
PA (UYPE-) UNIV PENNSYLVANIA.
XX
XX Moran JV, Dombroski BA, Kazanian HH, Boeke JD;
XX WPI; 2001-060015/07.
XX
XX DNac comprising a promoter P and an L1 cassette sequence having a core
XX retrotransposon element, useful for random insertion of a heterologous or
XX homologous DNA sequence into a cell genome and for correcting genetic
XX defects.
XX
XX Disclosure; Fig 14; 87pp; English.
XX
XX The present invention relates to DNA for a promoter and an L1 cassette
XX sequence having a core retrotransposon element. The invention is useful
XX for random insertion of a heterologous or homologous DNA sequence into a
XX cell genome, and for correction of a genetic defect in the cell into a
XX which the insertion is made. Genetic defects which may be corrected
XX includes cystic fibrosis, mutations in the dystrophin gene, genetic
XX defects associated with blood clotting and other genetic defects
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
Db 1 AAAAAAAAAAAAAAAAAAAAAA 22
RESULT 330
ADFI2348
ID ADFI2348 standard; DNA; 22 BP.
XX
XX ADFI2348;
XX
XX 12-FEB-2004 (first entry)
XX
XX L1 retrotransposon endonuclease cleavage site seq id 94.
XX
XX gene therapy; insertional mutation; germ line specific promoter;
XX mutation generation; transgenic animal; poly A element; non-LTE;
XX retrotransposon; long terminal repeats; L1; EN domain; endonuclease;
XX cleavage site; ds.
XX
XX Homo sapiens.
XX
XX US2003121063-A1.
XX
XX 26-JUN-2003.
XX
XX 09-AUG-2002; 2002US-00216122.
XX
XX 16-NOV-1995; 95US-0006831P.
XX 15-NOV-1996; 96US-00749805.
XX 28-APR-1997; 97US-00847844.
XX 01-SEP-2000; 2000US-00653812.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Kazanian HH, Ostertag E, Deberardinis R;
XX WPI; 2003-863454/80.
XX
XX Creating an insertional mutation in the germ line of an animal, useful
XX for generating a mutation in an offspring of an animal, comprises
XX introducing into an animal a nucleic acid molecule comprising a germ line
XX specific promoter.

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XX
XX Example 2; SEQ ID NO 94; 102pp; English.
XX
XX The invention describes a method of creating an insertional mutation in
XX the germ line of an animal by introducing into an animal a nucleic acid
XX molecule comprising a germ line specific promoter. The method is useful
XX for generating a mutation in an offspring of an animal, or for isolating
XX a nucleic acid from a genome of an offspring of an animal. The method may
XX also be used to correct genetic defects in animals, especially humans.
XX The nucleic acid is useful for generating mutations in a cell for
XX assessing the frequency with which selected cells under go insertional
XX mutagenesis for the generation of transgenic animals. This sequence
XX represents an exemplary cleavage site of the endonuclease encoded by
XX human L1 retrotransposon EN domain.
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
Db 1 AAAAAAAAAAAAAAAAAAAAAA 22
RESULT 331
ADQ25630/c
ID ADQ25630 standard; cDNA; 22 BP.
XX
XX ADQ25630;
XX
XX 23-SEP-2004 (first entry)
XX
XX Junction-specific poly(A) cDNA primer.
XX
XX Cystic fibrosis; muscular dystrophy; diabetes; gene discovery;
XX gene mapping; molecular haplotyping; agricultural research;
XX prostate cancer; breast cancer; lung cancer; colon cancer;
XX ovarian cancer; human; adenorectal carcinoma; primer; ss.
XX
XX Unidentified.
XX
XX US2004126770-A1.
XX
XX 01-JUL-2004.
XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX (KUMA/) KUMAR G.
XX (ABAR/) ABARZUA P.
XX
XX Kumar G, Abarzua P;
XX WPI; 2004-499113/47.
XX
XX Amplifying RNA sequences, useful in detecting diseases or mutation,
XX comprises synthesizing first strand cDNA, circularizing first strand
XX cDNA, and replicating the circularized cDNA molecules by rolling circle
XX replication.
XX
XX Disclosure; SEQ ID NO 6; 64pp; English.
XX
XX The present invention relates to composition and method for amplifying
XX RNA sequences. The method involves synthesising first strand cDNA
XX molecules from RNA molecules, circularising the first strand and
XX replicating the circularised first strand cDNA molecules using rolling
XX circle replication. The method is useful for producing nucleic acid
XX molecules corresponding to RNA molecules in an RNA sample, for
XX identifying or analysing and comparing RNA molecules and or sequences
XX expressed in different cells, tissues and or samples. The invention is

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CC also useful in detecting disease (e.g. cystic fibrosis, muscular
 CC dystrophy or diabetes), mutation detection, gene discovery, gene mapping
 CC (molecular haplotyping), agricultural research, and assessment of
 CC predisposition for cancers, e.g. prostate, breast, lung, colon or ovarian
 CC cancer. The present sequence is a function-specific cDNA primer. This
 CC sequence is used to illustrate the method of invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 332
 AAQ30430/c
 ID AAQ30430 standard; DNA; 23 BP.

XX AC AAQ30430;

XX DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)

XX Oligomer IL6803 for forming triplex with HUMIL6 target duplex.

XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KW malignancy; hepatitis; inflammation; ss.

XX OS Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
FT	/mod_base= OTHER
FT	/note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT	11..12
FT	/*tag= d
FT	/note= "o-xyloso dimer synthon linkage"
FT	12..23
FT	/*tag= c
FT	/label= inverted_polarity_region
FT	/note= "see comments"
FT	23
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.

XX 11-JUN-1992.

XX 25-NOV-1991; 91WO-US008811.

XX 23-NOV-1990; 90US-00617907.

PR 18-JAN-1991; 91US-00643382.

PR 08-APR-1991; 91US-00683420.

PR 17-APR-1991; 91US-00686544.

PR 17-APR-1991; 91US-00686546.

PR 17-APR-1991; 91US-00686547.

PR 27-SEP-1991; 91US-00766733.

XX (GILE-) GILEAD SCI INC.

XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;

XX WPI; 1992-217083/26.

XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 FT

PT herpes malignancy and inflammation.

XX Claim 12; Page 71; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
 CC coned. on one strand of the duplex. The oligomer, and others like it are
 CC useful in diagnosis and therapy of diseases characterized by specific DNA
 CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
 CC tumours and inflammation. The triple helices form under mild conditions
 CC thus assays may be carried out without subjecting the test specimen to
 CC harsh conditions. The oligomer contains an inverted polarity region
 CC formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
 CC (nucleotides have the 3' positions of xylose sugars linked via the o-
 CC xylene ring). Two nucleotides are coupled through a xylene residue to
 CC form the dimer synthon. This additional modifications may render the
 CC oligomer stable to nuclease activity. The oligomer is able to inhibit
 CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 23 BP; 2 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 5.5e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2729
 Db 23 TAAAAAAAAAAAAAAAAAAAAA 2

RESULT 333

AAQ30431/c
 ID AAQ30431 standard; DNA; 23 BP.

XX AC AAQ30431;

XX DT 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

XX Oligomer IL6804 for forming triplex with HUMIL6 target duplex.

XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KW malignancy; hepatitis; inflammation; ss.

XX OS Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
FT	/mod_base= OTHER
FT	/note= "OTHER= N4 N4 ethanocytosine"
FT	11..12
FT	/*tag= d
FT	/note= "o-xyloso dimer synthon linkage"
FT	12..23
FT	/*tag= c
FT	/label= inverted_polarity_region
FT	/note= "see comments"
FT	23
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.

XX 11-JUN-1992.

XX 25-NOV-1991; 91WO-US008811.

XX 23-NOV-1990; 90US-00617907.

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PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00766733.
XX (GILE-) GILEAD SCI INC.
PA
XX
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 71; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX interleukin 6 gene untranslated sequence contg. a purine rich sequence
XX concd. on one strand of the duplex. The oligomer, and others like it are
XX useful in diagnosis and therapy of diseases characterised by specific DNA
XX duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
XX tumours and inflammation. The triple helices form under mild conditions
XX such assays may be carried out without subjecting the test specimen to
XX harsh conditions. The oligomer contains an inverted polarity region
XX formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
XX (nucleotides have the 3'positions of xylose sugars linked via the o-
XX xylene ring). Two nucleotides are coupled through a xylene residue to
XX form the dimer synthon. This additional modifications may render the
XX oligomer stable to nuclease activity. The oligomer is able to inhibit
XX gene expression, as verified by in vitro systems. See also AAQ25452-25501
XX and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 23 BP; 1 A; 1 C; 0 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 22; DB 1; Length 23;
XX Best Local Similarity 100.0%; Pred. No. 5.5e+02;
XX Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2729
DB 23 TAAAAAAAAAAAAAAAAAAAAA 2
XX
XX
XX RESULT 334
XX ABL01773
XX ID ABL01773 standard; DNA; 23 BP.
XX
XX AC ABL01773;
XX
XX
XX 18-MAR-2002 (first entry)
XX
XX Human MSH2 (hMSH2) intronic sequence SEQ ID NO:126.
XX
XX Human; MLH1; MSH2; hMLH1; hMSH2; variant gene; diagnosis; HNPCC;
XX hereditary non-polyposis colorectal cancer; db.
XX
XX Homo sapiens.
XX
XX US2001044936-A1.
XX
XX 22-NOV-2001.
XX
XX 22-OCT-1999; 99US-00426548.
XX
XX 22-OCT-1998; 98US-0105180P.
XX
XX (ROBB/) ROBBINS D.
XX (LING/) LIN-GOERKE J L.

```

```

PA (LING/) LING J C.
XX
XX Robbins D, Lin-Goerke JL, Ling JC;
XX WPI; 2002-105577/14.
XX
XX New variants of the human MLH1 and MSH2 genes for diagnosing or
XX determining a predisposition for hereditary non-polyposis colorectal
XX cancer.
XX
XX Disclosure; Page 4; 38pp; English.
XX
XX The present invention describes a variant human MLH1 or MSH2 gene. Also
XX described are: (1) a method for diagnosing or predicting susceptibility
XX to hereditary non-polyposis colorectal cancer (HNPCC), comprising
XX screening a DNA sample for the variant MLH1 or MSH2 gene where presence
XX of the variant indicates presence of, or susceptibility to HNPCC; (2) a
XX method of identifying mutants in splice donor or acceptor sites of a
XX human MLH1 gene, comprising sequencing splice donor or acceptor sites of
XX the gene with intronic primers for the human MLH1 gene and analysing the
XX sequence to identify any mutants; (3) a method of identifying mutants in
XX splice donor or acceptor sites of a human MSH2 gene, comprising
XX sequencing splice donor or acceptor sites of the gene with intronic
XX primers for the human MSH2 gene and analysing the sequence to identify
XX any mutants; and (4) a transgenic model system for colorectal cancer
XX comprising cells expressing the variant MLH1 or MSH2 gene. The hMLH1 and
XX hMSH2 variants are used to diagnose or determine a patient's
XX susceptibility to hereditary non-polyposis colorectal cancer. ABL01648 to
XX ABL01745 and ABL01746 to ABL01831 represent hMLH1 and hMSH2 gene
XX fragments from the present invention. ABL01832 to ABL01839 represent
XX mutagenic primers used in the exemplification of the present invention
XX
XX Sequence 23 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 22; DB 1; Length 23;
XX Best Local Similarity 100.0%; Pred. No. 5.5e+02;
XX Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2729
DB 2 TAAAAAAAAAAAAAAAAAAAAA 23
XX
XX
XX RESULT 335
XX ADY85941/c
XX ID ADY85941 standard; DNA; 24 BP.
XX
XX AC ADY85941;
XX
XX
XX 02-JUN-2005 (first entry)
XX
XX RT-PCR primer used for cDNA synthesis from scorpion toxin RNA Seq 285.
XX
XX RT-PCR; ss; toxin; immunogenicity; antigen; antibody production; venom;
XX vaccine; diagnosis; primer; reverse transcriptase PCR.
XX
XX Synthetic.
XX
XX US2005065331-A1.
XX
XX 24-MAR-2005.
XX
XX 26-NOV-2003; 2003US-00721793.
XX
XX 02-DEC-2002; 2002US-0430067P.
XX
XX (UYME-) UNIV MEXICO NACIONAL AUTONOMA.
XX (SILA-) LAB SILANES SA DE CV.
XX
XX Corona VM, Garcia RMC, Gurrola BG, Valdez CNA, Becerril LB;
XX Possani PLD;
XX WPI; 2005-252753/26.
XX
XX

```


XX Novel isolated scorpion toxin polypeptide, useful for preventing
PT envenomation from scorpion stings, and as vaccine to prevent envenomation
PT from venom of scorpions of genus Centruroides.

XX Disclosure; SEQ ID NO 285; 135pp; English.

XX This invention relates to novel scorpion toxin polynucleotides and the
CC encoded proteins thereof having any one of 142 fully defined amino acid
CC sequences given in the specification. Specifically, it refers to long
CC chain toxins that block the sodium channels of excitable cells and also
CC short chain toxins that affect Erg type potassium channels. The present
CC invention describes immunogenic or antigenic compositions comprising a
CC scorpion toxin protein or fragment thereof, which can be used for the
CC generation of antibodies that are able to bind to and neutralize the in
CC vivo effects of scorpion venom. As such, they can be used in compositions
CC or appropriate recombinant fusion proteins in the development of vaccines
CC that can prevent envenomation from stings of scorpions of the genus
CC Centruroides. Furthermore, it provides a diagnostic method that uses an
CC immunogenic matrix for the purification of specific immunoglobulins
CC present in a sample that can determine the species of scorpion that has
CC stung an individual through the detection of identifying antibodies. In
CC addition, it provides methods that are useful for treating envenomation
CC from scorpion stings. This oligonucleotide is an RT-PCR primer used to
CC synthesize cDNA from scorpion toxin total RNA of the invention.

XX Sequence 24 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 2 Other;

Query Match 0.8%; Score 22; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 5.6e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
|||||
Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 336
ADF12409
ID ADF12409 standard; DNA; 26 BP.
XX ADF12409;
AC ADF12409;
XX 12-FEB-2004 (first entry)
DT L1 retrotransposon endonuclease cleavage site #1.
DE gene therapy; insertional mutation; germ line specific promoter;
KW mutation generation; transgenic animal; poly A element; non-LTR;
KW retrotransposon; long terminal repeats; L1; EN domain; endonuclease;
KW cleavage site; ds.
XX Homo sapiens.
OS
XX US2003121063-A1.
PN 26-JUN-2003.
XX 09-AUG-2002; 2002US-00216122.
PP 16-NOV-1995; 95US-0006831P.
PR 15-NOV-1996; 96US-00749805.
PR 28-APR-1997; 97US-00847844.
PR 01-SEP-2000; 2000US-00653812.
XX (UYPE-) UNIV PENNSYLVANIA.
PA Kazanian HH, Ostertag E, Deberardinis R;
XX WPI; 2003-863454/80.
DR
XX Creating an insertional mutation in the germ line of an animal, useful
PT for generating a mutation in an offspring of an animal, comprises

PT introducing into an animal a nucleic acid molecule comprising a germ line
PT specific promoter.

XX Example 2; Fig 14A; 102pp; English.

XX The invention describes a method of creating an insertional mutation in
CC the germ line of an animal by introducing into an animal a nucleic acid
CC molecule comprising a germ line specific promoter. The method is useful
CC for generating a mutation in an offspring of an animal, or for isolating
CC a nucleic acid from a genome of an offspring of an animal. The method may
CC also be used to correct genetic defects in animals, especially humans.

XX The nucleic acid is useful for generating mutations in a cell for
CC assessing the frequency with which selected cells under go insertional
CC mutagenesis for the generation of transgenic animals. This sequence
CC represents an exemplary cleavage site of the endonuclease encoded by
CC human L1 retrotransposon EN domain.

XX Sequence 26 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 4 Other;

Query Match 0.8%; Score 22; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
|||||
Db 5 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 337
ABK86170/c
ID ABK86170 standard; DNA; 25 BP.
XX ABK86170;
AC ABK86170;
XX 24-SEP-2002 (first entry)
DT Oligo dT primer #3 used in method to study gene expression.
DE Oligo dT primer; gene expression analysis; primer; ss.
KW Synthetic.
OS
XX WO200236828-A2.
PN 10-MAY-2002.
PD 01-NOV-2001; 2001WO-US045401.
PP 01-NOV-2000; 2000US-0244933P.
PR (GENO-) GENOMIC SOLUTIONS INC.
XX Kane MD, Dombkowski AA, Nagel AC;
XX WPI; 2002-508123/54.
DR Identifying and characterizing gene expression in samples, for
XX identifying mRNA's expressed at different levels, comprises employing an
PT identifier having a oligo-dT primer of a specific sequence and a
PT detectable marker at its 5' end.

XX Example 2; Page 21; 45pp; English.

XX The invention relates to systems for identification and characterization
CC of gene expression in one or more samples, comprising an identifier having
CC a specific oligo-dT primer sequence, where the identifier comprises a
CC detectable marker at its 5' end. The system is useful for identifying any
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
CC as the relative differences in mRNA between 2 or more samples, where
CC desired, for supporting discovery of new genes, and for identifying mRNA's
CC that are expressed at different levels between 2 or more samples. The new
CC system or method addresses limitations of prior methods by comprising
CC compositions and systems that incorporate new strategies where molecular

CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.

XX
SQ Sequence 25 BP; 0 A; 2 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.8; DB 1; Length 25;
Best Local Similarity 92.0%; Pred. No. 5.9e+02;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
|||||
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 340

AAF16616

ID AAF16616 standard; DNA; 26 BP.

XX

AC AAF16616;

XX

DT 13-MAR-2001 (first entry)

XX

DE Gastric acid production inhibiting oligonucleotide SEQ ID NO: 103.

XX

KW Gastric acid disturbance; gastric reflux; gastritis; dyspepsia;

KW stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;

KW DNA-RNA hybrid; ss.

XX

OS Homo sapiens.

XX

PN WO200071164-A1.

XX

PD 30-NOV-2000.

XX

PF 24-MAY-2000; 2000WO-AU000498.

XX

PR 24-MAY-1999; 99AU-00000510.

XX

PA (TACH/) TACHAS G.

XX

PI Tachas G;

XX

DR WPI; 2001-025093/03.

XX

PT Treating gastric acid disturbance by administering an oligonucleotide
PT which modulates the activity of a polypeptide involved in gastric acid
PT production or secretion.

XX

PS Example 3; Page 150; 164pp; English.

XX

CC The present invention provides oligonucleotides, and methods for their
CC use, which are useful in modulating the action of proteins involved in
CC gastric acid production. The target protein is preferably the histamine
CC H2 receptor or one of the proteins which form part of the gastric proton
CC pump. The sequences and methods of the invention are useful in the
CC treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers,
CC duodenal ulcers and other gastric acid disturbances, most of which are
CC caused by Helicobacter pylori

XX

SQ Sequence 26 BP; 23 A; 0 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.8; DB 1; Length 26;
Best Local Similarity 92.0%; Pred. No. 6e+02;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
|||||
Db 1 AAAAAAAAAAGAGAAAAAAAAAGA 25

RESULT 341

AAF16627/C

ID AAF16627 standard; DNA; 23 BP.

XX

AC AAF16627;

XX

DT 13-MAR-2001 (first entry)

XX

DE Gastric acid production inhibiting oligonucleotide SEQ ID NO: 114.

XX

KW Gastric acid disturbance; gastric reflux; gastritis; dyspepsia;

KW stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;

KW DNA-RNA hybrid; ss.

XX

OS Homo sapiens.

XX

PN WO200071164-A1.

XX

PD 30-NOV-2000.

XX

PF 24-MAY-2000; 2000WO-AU000498.

XX

PR 24-MAY-1999; 99AU-00000510.

XX

PA (TACH/) TACHAS G.

XX

PI Tachas G;

XX

DR WPI; 2001-025093/03.

XX

PT Treating gastric acid disturbance by administering an oligonucleotide
PT which modulates the activity of a polypeptide involved in gastric acid
PT production or secretion.

XX

PS Example 3; Page 152; 164pp; English.

XX

CC The present invention provides oligonucleotides, and methods for their
CC use, which are useful in modulating the action of proteins involved in
CC gastric acid production. The target protein is preferably the histamine
CC H2 receptor or one of the proteins which form part of the gastric proton
CC pump. The sequences and methods of the invention are useful in the
CC treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers,
CC duodenal ulcers and other gastric acid disturbances, most of which are
CC caused by Helicobacter pylori

XX

SQ Sequence 23 BP; 1 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;
Matches 22; Conservative 0; Mismatches 1;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
|||||
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 342

ADT55094

ID ADT55094 standard; DNA; 23 BP.

XX

AC ADT55094;

XX

DT 13-JAN-2005 (first entry)

XX

DE Electrophoresis apparatus-related DNA sequence #2.

XX

KW electrophoresis apparatus; variant gene isolation;

KW gene mutation detection; variant gene detection;

KW single nucleotide polymorphism analysis; SNP detection; ds.

XX

OS Unidentified.

XX

PN JF2004298001-A.

XX

PD 28-OCT-2004.

XX

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PF 28-MAR-2003; 2003JP-00091194.
XX
PR 28-MAR-2003; 2003JP-00091194.
XX
PA (MATU ) MATSUSHITA DENKI SANGYO KK.
XX
DR WPI; 2004-760825/75.
XX
XX Electrophoresis apparatus useful for isolating variant gene, comprises
PT heating apparatus, and sealed flow path comprising linear polymer and DNA
PT joint controlling agent, with DNA conjugates for separation, purification
PT and assay.
XX
PS Disclosure; Fig 2; 2lpp; Japanese.
XX
CC The invention comprises an electrophoresis apparatus for isolating
CC variant genes. The apirists consists of: a sealed flow path filled with
CC buffer containing linear polymer and DNA joint controlling agent, and
CC containing DNA conjugate for separation, DNA conjugate for purification,
CC and DNA conjugate for assay; and a heating apparatus for heating the
CC portion of sealed flow path in which the DNA conjugate for heating is
CC fixed. The electrophoresis apparatus is useful for isolating a variant
CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
CC detecting the presence or absence of a gene mutation, or variant gene,
CC and for single nucleotide polymorphism analysis. The present DNA sequence
CC was shown in a figure exemplifying the method of the invention.
XX
SQ Sequence 23 BP; 22 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match      0.8%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 6e+02;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 1 AAAAAAAAAAGAAAAAAAAA 23

RESULT 343
ADT55095/C
ID ADT55095 standard; DNA; 23 BP.
XX
AC ADT55095;
XX
XX 13-JAN-2005 (first entry)
XX
DE Electrophoresis apparatus-related DNA sequence #3.
XX
KW electrophoresis apparatus; variant gene isolation;
KW gene mutation detection; variant gene detection;
KW single nucleotide polymorphism analysis; SNP detection; ss.
XX
OS Unidentified.
XX
XX JP2004298001-A.
XX
XX 28-OCT-2004.
XX
XX 28-MAR-2003; 2003JP-00091194.
XX
PR 28-MAR-2003; 2003JP-00091194.
XX
PA (MATU ) MATSUSHITA DENKI SANGYO KK.
XX
DR WPI; 2004-760825/75.
XX
XX Electrophoresis apparatus useful for isolating variant gene, comprises
PT heating apparatus, and sealed flow path comprising linear polymer and DNA
PT joint controlling agent, with DNA conjugates for separation, purification
PT and assay.
XX
PS Disclosure; Fig 4; 2lpp; Japanese.
XX

```

```

CC The invention comprises an electrophoresis apparatus for isolating
CC variant genes. The apirists consists of: a sealed flow path filled with
CC buffer containing linear polymer and DNA joint controlling agent, and
CC containing DNA conjugate for separation, DNA conjugate for purification,
CC and DNA conjugate for assay; and a heating apparatus for heating the
CC portion of sealed flow path in which the DNA conjugate for heating is
CC fixed. The electrophoresis apparatus is useful for isolating a variant
CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
CC detecting the presence or absence of a gene mutation, or variant gene,
CC and for single nucleotide polymorphism analysis. The present DNA sequence
CC was shown in a figure exemplifying the method of the invention.
XX
SQ Sequence 23 BP; 0 A; 1 C; 0 G; 22 T; 0 U; 0 Other;

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```

Query Match      0.8%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 6e+02;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAGAAAAAAAAA 1

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```

RESULT 344
AAI66361/C
ID AAI66361 standard; DNA; 24 BP.
XX
AC AAI66361;
XX
DT 23-JAN-2002 (first entry)
XX
DE Human phosphatidylinositol-3 kinase 35 cDNA PCR primer #2.
XX
KW Human; phosphatidylinositol-3 kinase 35; PTDINS-3 kinase 35; cancer;
KW haemopathy; development disorder; HIV infection; immunological disease;
KW inflammation; gene therapy; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200175014-A2.
XX
XX 11-OCT-2001.
XX
XX 16-MAR-2001; 2001WO-CN000328.
XX
XX 17-MAR-2000; 2000CN-00114973.
XX
PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
XX WPI; 2002-025836/03.
XX
XX New human phosphatidylinositol-3 (PTDINS3) kinase 35 for diagnosing and
PT treating malignant tumor, hemopathy, human immunodeficiency virus
PT infection, immunological diseases and various inflammations.
XX
XX Example 2; Page 12; 34pp; Chinese.
XX
XX The present invention provides the protein and coding sequences of human
CC phosphatidylinositol-3 (PTDINS-3) kinase 35. The sequences can be used in
CC the treatment of cancer, haemopathy, HIV infection, development
CC disorders, immunological diseases and inflammation. The present sequence
CC is a PCR primer for the coding sequence of the invention
XX
XX Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match      0.8%; Score 21.4; DB 1; Length 24;
Best Local Similarity 95.7%; Pred. No. 6.1e+02;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2729
|| |||||

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Db      23  CTTAAAAAAAAAAAAAAAAAAAA 1

RESULT 345
AAL47515/c
ID  AAL47515 standard; DNA; 24 BP.
XX
AC  AAL47515;
XX
DT  13-SEP-2002 (first entry)
XX
DE  Human cyclophilin-40-12-54 coding sequence PCR primer #2.
XX
KW  Human; cyclophilin-40-12.54; immunopathy; cancer; PCR; primer; ss.
XX
OS  Homo sapiens.
XX
PN  CN131162-A.
XX
PD  16-JAN-2002.
XX
PF  28-JUN-2000; 2000CN-00116823.
XX
PR  28-JUN-2000; 2000CN-00116823.
XX
PA  (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI  Mao Y, Xie Y;
XX
DR  WPI; 2002-305482/35.
XX
PT  Polypeptide-human cyclophilin-40-12.54 and polynucleotide for coding it.
XX
PS  Example 2; Page 17 (Disclosure); 33pp; Chinese.
XX
CC  The present invention provides the protein and coding sequences of human
CC  cyclophilin-40-12.54. The sequences can be used in the treatment of
CC  immunopathy and cancer. The present sequence is a PCR primer for the
CC  coding sequence of the invention
XX
SQ  Sequence 24 BP; 2 A; 1 C; 2 G; 19 T; 0 U; 0 Other;

Query Match      0.8%; Score 21.4; DB 1; Length 24;
Best Local Similarity 95.7%; Pred. No. 6.1e+02;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2705 TACTAAAAAAAAAAAAAAAAAAAA 2727
    |||||
Db  23 TACTAAAAAAAAAAGNAAAAA 1

RESULT 346
ADG16131/c
ID  ADG16131 standard; DNA; 24 BP.
XX
AC  ADG16131;
XX
DT  26-FEB-2004 (first entry)
XX
DE  Compound activity characterisation-related oligonucleotide SeqID6.
XX
KW  compound activity characterisation; cellular activity;
KW  phenotypic attribute; candidate medicine; candidate treatment;
KW  multiple biological descriptor; cell marker; ss.
XX
OS  Unidentified.
XX
PN  WO200181895-A2.
XX
PD  01-NOV-2001.
XX
PF  24-APR-2001; 2001WO-US013248.
XX
PR  26-APR-2000; 2000US-0199778P.
XX
DR  WPI; 2002-041423/05.
XX

PR  26-APR-2000; 2000US-0199778P.
PR  20-FEB-2001; 2001US-00790214.
XX
PA  (CYTO-) CYTOKINETICS INC.
XX
PI  Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
XX
DR  WPI; 2002-041423/05.
XX
PT  Characterizing cellular activity of compound, by receiving images of
PT  cells with known activity and images of cells treated with compound,
PT  characterizing phenotypic attributes of images and comparing the
PT  phenotypes.
XX
PS  Disclosure; Fig 18; 139pp; English.
XX
CC  This invention relates to a novel method for the characterisation of the
CC  activity of a compound on cell. The method involves receiving images of
CC  cells with a cellular activity and images of other cells treated with the
CC  compound, quantitatively characterising phenotypic attributes of the
CC  image of cells with a cellular activity to produce a target phenotype for
CC  the cellular activity and that of the image of other cells to produce a
CC  second phenotype for the compound, and comparing the two phenotypes to
CC  determine whether the compound possesses cellular activity of a compound, for
CC  determining information about properties of substances based upon the
CC  substances. The invention is also useful for identifying promising to
CC  candidates in a search for new and better medicines and treatments using
CC  multiple biological descriptors from a single cell markers or components.
XX
SQ  Sequence 24 BP; 0 A; 1 C; 1 G; 22 T; 0 U; 0 Other;

Query Match      0.8%; Score 21.4; DB 1; Length 24;
Best Local Similarity 95.7%; Pred. No. 6.1e+02;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAA 2731
    |||||
Db  24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 347
ADG16127/c
ID  ADG16127 standard; DNA; 24 BP.
XX
AC  ADG16127;
XX
DT  26-FEB-2004 (first entry)
XX
DE  Compound activity characterisation-related oligonucleotide SeqID2.
XX
KW  compound activity characterisation; cellular activity;
KW  phenotypic attribute; candidate medicine; candidate treatment;
KW  multiple biological descriptor; cell marker; ss.
XX
OS  Unidentified.
XX
PN  WO200181895-A2.
XX
PD  01-NOV-2001.
XX
PF  24-APR-2001; 2001WO-US013248.
XX
PR  26-APR-2000; 2000US-0199778P.
XX
DR  WPI; 2002-041423/05.
XX
PA  (CYTO-) CYTOKINETICS INC.
XX
PI  Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
XX
DR  WPI; 2002-041423/05.
XX

```

PT Characterizing cellular activity of compound, by receiving images of
 PT cells with known activity and images of cells treated with compound,
 PT characterizing phenotypic attributes of images and comparing the
 XX phenotypes.

PS Disclosure; Fig 18; 139pp; English.

XX
 XX
 CC This invention relates to a novel method for the characterisation of the
 CC activity of a compound on cell. The method involves receiving images of
 CC cells with a cellular activity and images of other cells treated with the
 CC compound, quantitatively characterising phenotypic attributes of the
 CC image of cells with a cellular activity to produce a target phenotype for
 CC the cellular activity and that of the image of other cells to produce a
 CC second phenotype for the compound, and comparing the two phenotypes to
 CC determine whether the compound possesses cellular activity. The invention
 CC may be useful for characterising cellular activity of a compound, for
 CC determining information about properties of substances based upon the
 CC information about structure of living or non-living cells exposed to
 CC substances. The invention is also useful for identifying promising
 CC candidates in a search for new and better medicines and treatments using
 CC multiple biological descriptors from a single cell markers or components.

XX Sequence 24 BP; 2 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 24;
 Best Local Similarity 95.7%; Pred. No. 6.1e+02;
 Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731

DB 24 AAAAAAAAAAAAAAAAAATAAAAAA 2

RESULT 348

AAQ75712/C

ID AAQ75712 standard; DNA; 21 BP.

XX
 XX
 AC AAQ75712;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2705 TACTAAAAAAAAAAAAAAAAA 2725

DB 21 TACTAAAAAAAAAAAAAAAAA 1

RESULT 349

AAAX26973/C

ID AAAX26973 standard; cDNA; 21 BP.

XX
 XX
 AC AAAX26973;

XX 25-JUN-1999 (first entry)

XX Primer used to reverse transcribe mamaglobin RNA.

XX Human; mammary-specific protein; mamaglobin; antigen; vaccine;
 XX mamaglobin-expressing cancer; breast cancer;
 XX autologous tumor lymphocyte; diagnosis; marker; primer; ss.

XX Synthetic.

XX WO9914230-A1.

XX 25-MAR-1999.

XX 18-SEP-1998; 98WO-US017991.

XX 18-SEP-1997; 97US-00933149.

XX (UNIW) UNIV WASHINGTON.

XX Watson MA, Fleming TP;

XX WPI; 1999-244021/20.

XX Mamaglobin, secreted protein overexpressed in breast cancer.

XX Example 2; Page 55; 60pp; English.

XX The present primer was used to reverse transcribe RNA encoding a human
 CC mammary-specific protein, designated mamaglobin. The specification
 CC describes a protein comprising a mamaglobin antigen that is recognized
 CC by B and/or Tc cells specific for the natural, secreted and glycosylated
 CC form of mamaglobin polypeptide. This protein, or recombinant vectors
 CC that express it, are used in vaccines for treating mamaglobin-
 CC expressing cancers, specifically of the breast. Such cancers can also be
 CC treated using autologous tumor lymphocytes activated ex vivo with an
 CC mamaglobin antigen, then returned to the patient. Expression of
 CC mamaglobin is elevated in 27% of stage I primary breast cancers, so it
 CC represents a marker useful for diagnosis of this disease

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 350

AAZ44350/C

ID AAZ44350 standard; DNA; 21 BP.

XX

```
AC AAZ44350;
DT 04-APR-2000 (first entry)
DE Protein kinase inhibiting primer #12.
XX
XX Antimicrobial; cytostatic; immunosuppressive; protein kinase;
KW prophylactic; therapy; treatment; cancer; autoimmune disease;
KW pathogenic microorganism; primer; ss.
XX
XX Unidentified.
OS
XX US5998596-A.
PN
XX 07-DEC-1999.
PD
XX 04-APR-1995; 95US-00416214.
PF
XX 04-APR-1995; 95US-00416214.
PR
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX Bergan R, Neckers L;
PI
XX WPI; 2000-104623/09.
DR
XX Oligonucleotides inhibiting protein kinase, useful for treating diseases
PT such as cancer and autoimmune disease.
PT
XX Example 8; Col 27-28; 26pp; English.
XX
XX This invention describes novel purified aptameric oligonucleotides which
CC have antimicrobial, cytostatic and immunosuppressive activity. The
CC oligonucleotides are useful for binding to and preventing or inhibiting
CC the biological function of a protein kinase or a target molecule and for
CC detecting the presence or absence of a target molecule in biological
CC samples. The oligonucleotides are also useful for prophylactic and
CC therapeutic treatment of diseases such as cancer, autoimmune diseases and
CC diseases caused by pathogenic microorganisms. This sequence represents a
CC primer used in the method of the invention
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 351
AAD03631/c
ID AAD03631 standard; DNA; 21 BP.
XX
XX AAD03631;
AC
XX 19-JUN-2001 (first entry)
DT
XX Human ku autoantigen amplifying KU_FOR primer.
DE
XX Human; natural antisense mRNA enrichment; antisense-based therapy;
KW RT-PCR primer; ku autoantigen; ss.
KW
XX Homo sapiens.
OS
XX WO200125488-A2.
PN
XX 12-APR-2001.
PD
XX 06-OCT-2000; 2000WO-US027557.
PF
XX
XX
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```
PR 06-OCT-1999; 99US-0157843P.
XX (QUAR-) QUARK BIOTECH INC.
PA
XX Gilad S, Einat P, Grossman A;
PI
XX WPI; 2001-266326/27.
DR
XX Enrichment and detection of natural antisense mRNA comprises generating
XX double stranded hybrid cDNA using a polymerase with an exonuclease
PT activity, amplifying using a DT primer and cloning.
PT
XX Example; Page 12; 37pp; English.
XX
XX The invention relates to a method for enrichment of natural antisense
CC messenger RNA. This method involves generating a population of cDNA from
CC mRNA, incubating the generated cDNA to produce double stranded hybrid DNA
CC molecules consisting of sense and antisense cDNA, treating the hybrid
CC molecules using DNA polymerase with an exonuclease activity, amplifying
CC the double stranded molecule using a deoxythymidine (dT) primer and
CC cloning the amplified double stranded molecule. This method is useful for
CC enrichment of natural antisense mRNA from any natural source of RNA. It
CC is used to detect whether mRNAs have a natural anti-sense counterpart.
CC The method provides a basis for finding new genes with important cellular
CC regulatory roles or new regulatory information for known genes and
CC provides a starting material for development of an antisense-based
CC therapeutic to treat a disease in which down regulation or inhibition of
CC the sense gene or transcript is involved. The present sequence is KU FOR
CC reverse transcription PCR (RT-PCR) primer used for amplifying human ku
CC autoantigen sequence. This primer is used in endogenous antisense
CC identification (EASI) procedure for enrichment of natural antisense mRNA
CC
XX Sequence 21 BP; 6 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2690 AGAGCCCTAAGTTTGTACTAA 2710
Db 21 AGAGCCCTAAGTTTGTACTAA 1

RESULT 352
AAF99707/c
ID AAF99707 standard; DNA; 21 BP.
XX
XX AAF99707;
AC
XX 12-JUN-2001 (first entry)
DT
XX Immunostimulatory nucleic acid #823.
DE
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX WO200122972-A2.
PN
XX 05-APR-2001.
PD
XX 25-SEP-2000; 2000WO-US026383.
PF
XX 25-SEP-1999; 99US-0156113P.
PR
XX 27-SEP-1999; 99US-0156135P.
PR
XX 23-AUG-2000; 2000US-0227436P.
PR
XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
PA
XX
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```

PI Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 56; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ

```

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

```

RESULT 353
AAH42480/C
ID AAH42480 standard; DNA; 21 BP.
XX
XX AAH42480;
XX
XX 01-OCT-2001 (first entry)
XX
XX Oligonucleotide used to produce branched chain compounds.
XX
XX Branched chain compound; nucleic acid synthesis; primer extension;
XX reverse transcription; nucleic acid hybridization;
XX nucleic acid amplification; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /note= "NH2-C6 attached"
XX modified_base 4 /*tag= b
XX /note= "NH2-C6 attached"
XX misc_feature 6..7 /*tag= c
XX /note= "branch present"
XX
XX EPI111068-A1.
XX
XX 27-JUN-2001.
XX
XX 21-DEC-1999; 99EP-00125484.
XX
XX 21-DEC-1999; 99EP-00125484.
XX
XX (LION-) LION BIOSCIENCE AG.
XX (VECG-) VEC GENOMICS GMBH.
XX

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PI Schmidt W, Hiller R, Huber M, Mueller M;
XX WPI; 2001-466959/51.
XX
XX Branched compounds useful in e.g. nucleic acid synthesis reaction
XX comprises nucleic acid moieties optionally extended by a polymerase.
XX
XX Example 1; Page 10; 31pp; English.
XX
XX The specification describes branched compounds containing nucleic acid
XX moieties optionally extended by a polymerase. The branched chain
XX compounds of the invention are used in nucleic acid synthesis reaction,
XX primer extension reaction, reverse transcription reaction of RNA into
XX DNA, nucleic acid hybridization experiment (for identifying sequence of a
XX nucleic acid), and nucleic acid amplification experiment (for analysing
XX the expression pattern of genes). The compounds are also used in solid-
XX phase enzymatic reactions. The present sequence was used in the course of
XX the invention to produce branched chain compounds
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ

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Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

```

RESULT 354
AAH45788/C
ID AAH45788 standard; DNA; 21 BP.
XX
XX AAH45788;
XX
XX 07-SEP-2001 (first entry)
XX
XX Human KUAPP70 gene PCR primer SEQ ID NO: 40.
XX
XX Nucleic acid amplification; adapter DNA; human; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200138572-A1.
XX
XX 31-MAY-2001.
XX
XX 16-NOV-2000; 2000WO-JP008073.
XX
XX 19-NOV-1999; 99JP-00330726.
XX
XX 25-JUL-2000; 2000JP-00224663.
XX
XX (TAKI) TAKARA SHUZO CO LTD.
XX
XX Aoyagi K, Sasaki H, Terada M, Mineno J, Asada K, Kato I;
XX WPI; 2001-355947/37.
XX
XX Amplifying nucleic acids with base sequences of mRNAs in sample while
XX sustaining the ratio among them used to monitor mRNA expression,
XX applicable in producing e.g. cRNA library and DNA microarrays.
XX
XX Example 1; Page 64; 67pp; Japanese.
XX
XX The present invention describes a method of amplifying nucleic acids,
XX involving forming a single-stranded DNA to an mRNA in a sample with a
XX primer, synthesising a DNA strand complementary to the single-stranded
XX DNA to form a double-stranded DNA, adding a single or double-stranded
XX adapter DNA to the double-stranded DNA, and amplifying the DNA strand
XX using a second primer with a nucleic acid sequence in the adapter DNA.
XX This can be used to amplify nucleic acids to monitor mRNA expression,
XX which is applicable in producing e.g. cRNA libraries, cDNA libraries, DNA
XX

CC microarrays or membrane arrays in gene engineering and gene expression
CC analysis, and in drug development and health maintenance and management.
CC The present sequence is a PCR primer described in the exemplification of
CC the invention

SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2416 TTACGGGCTGAACAGTGGTCT 2436

DB 21 TTACGGGCTGAACAGTGGTCT 1

RESULT 355

ID ABS78428/c

XX ABS78428 standard; DNA; 21 BP.

AC ABS78428;

XX 13-DEC-2002 (first entry)

XX Angiogenesis inhibitory oligonucleotide #912.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.

OS Synthetic.

XX WO200253141-A2.

XX 11-JUL-2002.

XX 14-DEC-2001; 2001WO-US048458.

XX 14-DEC-2000; 2000US-0255534P.

XX (COLE-) COLEY PHARM GROUP INC.

XX Bratzler RL;

XX WPI; 2002-566690/60.

XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.

XX Claim 2; Page 35; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 356

ID ABL39404/c

XX ABL39404 standard; DNA; 21 BP.

AC ABL39404;

XX 16-APR-2002 (first entry)

XX Immunostimulatory nucleic acid SEQ ID NO: 840.

XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..21

FT /tag= a

FT /mod_base= OTHER

XX /note= "phosphorothioate backbone"

PN WO200197843-A2.

XX 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.

XX 22-JUN-2000; 2000US-0213346P.

XX (IOWA) UNIV IOWA RES FOUND.

XX Weiner G, Hartmann G;

XX WPI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 309; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729


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XX 02-FEB-2001; 2001US-00776479.
PF
XX 03-FEB-2000; 2000US-0179991P.
PR
XX (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
PI
XX WPI; 2003-657977/62.
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 17; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
    Query Match      0.8%; Score 21; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 6.1e+02;
    Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 360
ADC24379/c
ID ADC24379 standard; DNA; 21 BP.
XX
AC ADC24379;
XX
DT 18-DEC-2003 (first entry)
XX
XX PCR primer for amplifying the ATP dependant DNA helicase gene #SEQ ID 69.
DE
XX DNA amplification; copy number; polymerase chain reaction; PCR; primer;
KW
KW 55.
XX
XX Synthetic.
OS
XX
XX JP2002345466-A.
PN
XX
XX 03-DEC-2002.
PD
XX
XX 08-MAY-2001; 2001JP-00137858.
PF
XX
XX 08-MAY-2001; 2001JP-00137858.
PR
XX
XX (TAKA-) TAKARA BIO KK.
PA
XX (KOKU-) KOKURITSU GAN CENT SOCHO.
PA
XX (IYAK-) IYAKUJIN FUKUSAYO HIGAI KYUSAI KENKYU SH.
XX
XX WPI; 2003-460878/44.
XX
XX Amplification of DNA maintaining genes and copy number of the sequence on
PT a genome, and their ratios in the resultant DNA fragment.
XX
XX Example 5; SEQ ID NO 69; 33pp; Japanese.
XX
XX The invention relates to a method for the amplification of DNA that
CC maintains genes and copy number of the sequence. This method is useful
CC for easy and operable amplification of DNA. The method was carried out by
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CC fragmentation genomic DNA, preparation of blunt end of the fragmented
CC DNA, ligation of an adapter to the blunted DNA, PCR of the ligated DNA in
CC 2 steps, and confirmation of the amplified APC gene. The current sequence
CC represents a PCR primer used in an example from the invention.
XX
XX Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
SQ
    Query Match      0.8%; Score 21; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 6.1e+02;
    Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2416 TTACGGGCTGAAGAGTGGTCT 2436
Db 21 TTACGGGCTGAAGAGTGGTCT 1

RESULT 361
ADK01344/c
ID ADK01344 standard; DNA; 21 BP.
XX
AC ADK01344;
XX
DT 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #64.
DE
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX
XX DE10208794-A1.
PN
XX
XX 04-SEP-2003.
PD
XX
XX 28-FEB-2002; 2002DE-01008794.
PF
XX
XX 28-FEB-2002; 2002DE-01008794.
PR
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
PA
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
PI
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 6; 8pp; German.
PS
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular.
CC Physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
```

CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 362
 ADK01341/c
 ID ADK01341 standard; DNA; 21 BP.

XX AC ADK01341;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #61.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX XX DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 6; 8pp; German.

XX CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.

CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
 Db 21 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 363

ADK01330/c

ID ADK01330 standard; DNA; 21 BP.

XX AC ADK01330;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #50.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX XX DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 5; 8pp; German.

XX CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-

conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2727
Db 21 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 364

ID ADK01288/c

ADK01288 standard; DNA; 21 BP.

AC ADK01288;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #8.

SS; hybridisation; capture oligonucleotide; pattern; mucosal; hair root; blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

Sorting single-stranded nucleic acid, useful for analyzing expression patterns and screening active agents, uses capture agent with variable and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region

comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAA 2726

Db 21 ACTAAAAAAAAAAAAAAAAA 1

RESULT 365

ADM96310/c

ID ADM96310 standard; DNA; 21 BP.

AC ADM96310;

DT 17-JUN-2004 (first entry)

DE Human ATP5F1 gene, RT-PCR primer #1.

SS; human; H+ transporting; mitochondrial ATP synthase; subunit B;

isoform 1; ATP5F1; reverse transcriptase; RT-PCR; primer.

OS Synthetic.

PN US2003211483-A1.

PD 13-NOV-2003.

PF 09-MAY-2002; 2002US-00144179.

PR 09-MAY-2002; 2002US-00144179.

PA (SCHR/) SCHROEDER B G.

PA (CHEN/) CHEN C.

PA (SCHR/) SCHROTH G P.

XX Schroeder BG, Chen C, Schroth GP;

XX WPI; 2003-901581/82.

XX Enriching low abundance polynucleotides in a sample, useful for gene expression analysis, comprises exposing the sample to an enzymatically non-extendable nucleobase oligomer to block polymerase activity on high abundance species.

XX Example 1; Page 20; 43pp; English.

XX The invention relates to a method of enriching a low abundance polynucleotide in a sample of polynucleotides comprising a low abundance and a high abundance polynucleotide. The method comprises exposing the

sample to an enzymatically non-extendable nucleobase oligomer having a nucleobase sequence complementary to a sequence within the high abundance polynucleotide under conditions so that base pairing occurs, and subjecting the sample to conditions for polymerase extension. Preferably, the enzymatically non-extendable nucleobase oligomer does not have a ribose-containing oligomeric structure. It is a peptide nucleic acid (PNA) oligomer or is a modified nucleotide oligomer or internucleotide analogue oligomer. The modified nucleotide oligomer is selected from 2'-modified and 3'-modified nucleotide oligomers. The 2'-modified and 3'-modified nucleotide oligomers are selected from 2'-O-alkyl modified nucleotide oligomers and 3'-alkyl modified nucleotide oligomers. The 2'-O-alkyl modified nucleotide oligomers are 2'-O-methyl nucleotide oligomers. The modified nucleotide oligomer or internucleotide analogue oligomer is selected from locked nucleic acids (LNA), N³-ps', phosphoramidate (NP) oligomers, minor groove binder-linked-oligonucleotides (MGB-linked oligonucleotides), phosphorothioate (PS) oligomers, C1-C4 alkylphosphonate oligomers, phosphoramidates, beta-phosphodiester oligonucleotides, and alpha-phosphodiester oligonucleotides. The C1-C4 alkylphosphonate oligomers are methyl phosphonate (MP) oligomers. The enzymatically non-extendable nucleobase oligomer is chimeric. The sample comprises more than one high abundance polynucleotide. The sample comprises RNA, and polymerase extension is by reverse transcription to yield a first strand cDNA. The method further comprises second strand cDNA synthesis. The sample is exposed to the nucleobase oligomer during the first and/or second strand cDNA synthesis. The method further comprises an amplification step, which is by polymerase chain reaction (PCR) or by in vitro transcription. The RNA is mRNA or cRNA or total cellular RNA. Alternatively, the sample comprises DNA, and polymerase extension is by DNA-dependent DNA polymerase in a PCR. The method also comprises labelling the amplified polynucleotides. The labelling is concomitant with or subsequent to amplification. The methods are useful in selective enrichment of low abundance polynucleotides in a sample. The pool of enriched polynucleotides may be used in analysing gene expression and in creating cDNA libraries. The present sequence represents a reverse transcriptase (RT)-PCR primer which was used to amplify the human import precursor of subunit B of the H+ transporting, mitochondrial ATP synthase, subunit B, isoform 1 (ATP5F1) gene.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 366
ADJ88057/c

ID ADJ88057 standard; DNA; 21 BP.

XX

AC ADJ88057;

XX 06-MAY-2004 (first entry)

RT primer used in the synthesis of an artificial gene transcript.

XX Selective enrichment; gene expression; RT; reverse transcriptase; primer;

XX ss.

XX Unidentified.

XX US2004014105-A1.

XX 22-JAN-2004.

XX 09-MAY-2003; 2003US-00435489.

XX 09-MAY-2002; 2002US-00144179.

XX

PA (SCHR/) SCHROEDER B G.
PA (CHEN/) CHEN C.
PA (SCHR/) SCHROTH G P.

XX Schroeder BG, Chen C, Schroth GP;

XX WPI; 2004-121562/12.

DR Enriching low abundance polynucleotide relative to a high abundance

XX polynucleotide in a sample, for analyzing gene expression and creating cDNA libraries, comprises blocking polymerase activity on high abundance polynucleotides.

XX Example 1; SEQ ID NO 41; 62pp; English.

XX The present invention relates to methods for the selective enrichment of low abundance polynucleotides. The invention is useful for analysing gene expression in a sample and creating cDNA libraries. The present sequence is reverse transcriptase (RT) primer used in the synthesis of an artificial gene transcript.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 367

ADM07216/c

ID ADM07216 standard; DNA; 21 BP.

XX ADM07216;

XX 15-JUL-2004 (first entry)

XX Control primer used in cDNA first strand synthesis.

XX Double-stranded cDNA synthesis; cDNA first strand synthesis;
XX cDNA second strand synthesis; RNA template; RNA amplification;
XX differential gene expression; primer; ss.

XX Synthetic.

XX US2004081962-A1.

XX 29-APR-2004.

XX 23-OCT-2002; 2002US-00278760.

XX 23-OCT-2002; 2002US-00278760.

XX (CHEN/) CHEN C.

XX (SCHR/) SCHROEDER B.

XX (BRAN/) BRANDIS J.

XX (SCHR/) SCHROTH G.

XX Chen C, Schroeder B, Brandis J, Schroth G;

XX WPI; 2004-340131/31.

XX Synthesizing double-stranded cDNA, by synthesizing a cDNA strand from RNA

XX template, removing the template and synthesizing double-stranded cDNAs

XX using the cDNA as template in the presence of processive DNA polymerase

XX and random primers.

XX Example 1; SEQ ID NO 2; 19pp; English.

XX The present invention relates to a method for synthesising double-

stranded cDNA, by synthesising first cDNA strands in a first reaction mixture comprising reverse transcriptase, RNA template, and first strand primer complementary to template, removing the template, synthesising double-stranded cDNAs in a second reaction mixture comprising processive DNA polymerase, DNA ligase, first cDNA strand as template and random primers having a mixture of oligonucleotides having random DNA sequences. Also disclosed is a method for amplifying a population of RNA molecules to produce a pool of double-stranded cDNA molecules, and a kit for synthesising double-stranded cDNA. The generated cDNA products are useful in determining quantitative information about the genetic profile of nucleic acid in original RNA sample. The method of the invention is useful in differential gene expression assays for the analysis of diseased and normal tissue and for large-scale correlation studies on sequences, mutations, variants or polymorphisms among samples. The method is efficient in synthesising improved cDNA molecules and effective in generating useful quantities of an amplified cDNA product that comprises a population of cDNA molecules in substantially the same relative molar ratio as the RNA or mRNA starting material. The present sequence represents a primer used for cDNA first strand synthesis.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 368

ADU90228/c

ID ADU90228 standard; DNA; 21 BP.

AC ADU90228;

XX 10-FEB-2005 (first entry)

XX Allergic response suppressor oligonucleotide #912.

ss; antiasthmatic; anti-allergic; dermatological; anti-inflammatory;
antibacterial; virucide; immunoglobulin E antagonist; allergy;
immunostimulator; asthma; rhinitis; urticaria; dermatitis;
bacterial infection; viral infection.

XX Synthetic.

XX US2004235774-A1.

XX 25-NOV-2004.

XX 23-APR-2004; 2004US-00831778.

XX 03-FEB-2000; 2000US-0179991P.

XX 02-FEB-2001; 2001US-00776479.

XX (BRAT/) BRATZLER R L.

PA (PETE/) PETERSEN D M.

PA (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic dermatitis, in a subject, comprises administering a first and second dose of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 912; 235pp; English.

XX The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an

CC immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using an immunostimulatory nucleic acid alone or in combination with other medications. This sequence also can be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the CC method of the invention.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 369

ADV94812/c

ID ADV94812 standard; DNA; 21 BP.

XX ADV94812;

XX 10-MAR-2005 (first entry)

XX Human glycosyltransferase pENTR/DTOPO vector 3' primer.

XX glycosyltransferase; N-acetyl-D-galactosamine; GalNac; screening; ss;
KW PCR; primer.

XX Synthetic.

XX JP2004357635-A.

XX 24-DEC-2004.

XX 06-JUN-2003; 2003JP-00162685.

XX 06-JUN-2003; 2003JP-00162685.

XX (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.

XX (SEKG) SEIKAGAKU KOGYO CO LTD.

XX WPI; 2005-035730/04.

XX Novel glycosyltransferase capable of transferring N-acetyl-D-galactosamine (GalNac) residue to GalNac receptor substrate from GalNac donor substrate, useful in screening substances that promotes/inhibits glycosyltransferase activity.

XX Example 1; SEQ ID NO 6; 37pp; Japanese.

XX The invention relates to a novel glycosyltransferase capable of transferring an N-acetyl-D-galactosamine (GalNac) residue to a GalNac receptor substrate from a GalNac donor substrate. The glycosyltransferase comprises a polypeptide having sequence ADV94808 containing amino acids 43-601 or 1-601 of a fully defined sequence of 601 amino acids, as given in the specification, or ADV94808 in which one or more amino acids are substituted, deleted, inserted or rearranged. The invention further comprises: a nucleic acid encoding the 601 amino acid glycosyltransferase protein and comprising a sequence ADV94807 having bases 127-1806 or 1-1806 of a fully defined sequence of 1806 base pairs, as given in the specification, or a sequence complementary to ADV94807; a nucleic acid capable of hybridizing under stringent conditions, with the nucleic acid that consists of the base sequence complementary to the 1806 bp polynucleotide; a vector containing the glycosyltransferase encoding DNA or its complementary sequence; a recombinant containing the vector; an antibody capable of specifically recognising the glycosyltransferase protein; an active regulator of the glycosyltransferase protein; and a

therapeutic agent of the disease caused due to change of activity of the glycosyltransferase, containing an active regulator of the glycosyltransferase protein as an active ingredient. The glycosyltransferase protein is useful in screening substances that promote or inhibit the activity of glycosyltransferase. The glycosyltransferase complementary DNA is useful as a probe for detecting in vivo expression of the glycosyltransferase DNA, and as a reagent or diagnostic for medical studies. The active regulator of the glycosyltransferase protein, is useful as the therapeutic agent for treating the disease caused due to change of activity of the glycosyltransferase protein. The glycosyltransferase protein is capable of transferring GalNAc residue to a GalNAc receptor substrate from a GalNAc donor substrate. This polynucleotide sequence represents a primer used in the exemplification of the invention.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||

Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 370
ADV86473/C

ID ADV86473 standard; DNA; 21 BP.

XX

AC ADV86473;

XX 24-MAR-2005 (first entry)

XX Fluorophore-labeled biological detection oligonucleotide #6.

XX Fluorophore; detection; antibody; antigen; avidin; hormone; ss.

XX Synthetic.

XX US6838244-B1.

XX 04-JAN-2005.

XX 18-MAY-2001; 2001US-00859736.

XX 19-MAY-2000; 2000US-0205452P.

XX (MONS) MONSANTO TECHNOLOGY LLC.

XX Li WR, Zhou JS;

XX WPI; 2005-063191/07.

XX Novel oligonucleotide molecule labeled with several fluorophores, useful for detecting biological molecules e.g., antibody, antigen, avidin or protein.

XX Example 1; SEQ ID NO 6; 18pp; English.

XX The invention relates to an oligonucleotide molecule (ON) labeled with several fluorophores of one or more types embedded in its backbone, where one or more of the fluorophores is not located at either the 3' or 5' terminus of ON. ON is useful for sequencing nucleic molecules. ON is useful for detecting biological molecules e.g., antibody, antigen, ON is avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is capable of providing strong fluorescence signals at different wavelengths. This sequence corresponds to an example of an oligonucleotide of the invention.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||

Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 371
ADW71577

ID ADW71577 standard; DNA; 21 BP.

XX

AC ADW71577;

XX 21-APR-2005 (first entry)

XX Oligonucleotide DS21mer(A-T).

XX DNA detection; ds.

XX Unidentified.

XX WO2005010177-A1.

XX 03-FEB-2005.

XX 20-JUL-2004; 2004WO-JP010300.

XX 25-JUL-2003; 2003JP-00201500.

XX 26-FEB-2004; 2004JP-00051320.

XX (ONOA/) ONO A.

XX Ono A;

XX WPI; 2005-162557/17.

XX Complex useful for detecting non-Watson Crick base pair in double stranded DNA, comprises first and second single stranded nucleic acid or its derivative and metal ion.

XX Example 1; Page 32; 73pp; Japanese.

XX The invention relates to a complex (Cl) comprising a first and second single stranded nucleic acid or its derivative and a metal ion, where the first and second base of the strands forms a bond with metal ion. Also included are detecting the existence of thymine-thymine, cytosine-cytosine or cytosine-thymine base pair in a DNA or its analog (involving melting DNA or its analog in an aqueous medium, processing the solution for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+ and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and comparing the characteristics of the solution, where change in characteristics in Hg(II)2+ , Ag+ and combinations of Hg(II)2+ and Ag+ represents the existence of T-T base pair, C-C base pair and C-T base pair in the respective DNA solutions) and an agent (Al) for detecting a metal ion (comprising one or more DNA molecules or their analogs having a metal binding region, where the coupling of metal ion is detected by analyzing the characteristic change in DNA). The complex (Cl) is useful as a non-Watson Crick base pair metal complex or for detecting non-Watson Crick base pair in a double stranded DNA. The complex (Cl) enables to detect non-Watson Crick base pair in a double stranded DNA. The present sequence is a 21mer double stranded oligonucleotide with no Non-Watson-Crick base pairing.

Sequence 21 BP; 21 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||

Db 1 AAAAAAAAAAAAAAAAAAAAAA 1

XX Modulating, in a host cell, a protein-protein interaction between first
PT protein, PRK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
PT regulated kinase 3) by administering modulating compound.
XX
XX Disclosure; Fig 49; 296pp; English.
XX
XX The invention relates to a method for modulating, in a host cell, a
CC protein-protein interaction between a first protein which is PRK (p38-
CC regulated/activated protein kinase or MAPKAPK5) and a second protein
CC which is ERK3 (extracellular signal-regulated kinase 3). The method
CC comprises administering to the cell a compound capable of modulating the
CC protein-protein interaction. The method is useful in modulating in a host
CC cell a protein-protein interaction between a first protein which is PRK
CC and a second protein which is ERK3 for treating inflammation or
CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
CC inflammatory disease, systemic lupus erythematosus, rhinitis,
CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
CC KU70 transcript, which is used in the exemplification of the present
XX invention.
XX
XX Sequence 21 BP; 5 A; 3 C; 6 G; 2 T; 5 U; 0 Other;
SQ

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2057 AGCTTCGCTTCACATACAGA 2077
DB 21 AAGCTTCGCTTCACATACAGA 1

RESULT 376
AED13306/C
ID AED13306 standard; DNA; 21 BP.
XX
XX AED13306;
XX
XX 01-DEC-2005 (first entry)
XX
XX Oligonucleotide #8 used to illustrate nucleic acid labeling method.
DE
XX
XX DNA detection; RNA detection; SNP detection; ss.
XX
XX Synthetic.
XX
XX JP2005265617-A.
XX
XX 29-SEP-2005.
XX
XX 18-MAR-2004; 2004JP-00078900.
XX
XX 18-MAR-2004; 2004JP-00078900.
XX
XX (TAKE/) TAKENAKA S.
XX
XX Takenaka S, Nojima T, Mukumoto K, Tabata E;
XX
XX WPI; 2005-685344/71.
XX
XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
PT derivative for labeling thymine, uracil and guanine, which exists in
PT mismatch region of nucleic acid or unstable region of hydrogen bond of
PT nucleic acid.
XX
XX Example 6; Page 28; 40pp; Japanese.
PS
XX The present invention relates to a method (M1) for labeling double
CC stranded nucleic acid for efficient detection of DNA or RNA. The method

CC comprises using a carbodiimide derivative for labeling one or more of
CC thymine, uracil and guanine, which exists in the mismatch region of the
CC double stranded nucleic acid or its vicinity, or unstable region of the
CC hydrogen bond of the double stranded nucleic acid (M1) is useful for
CC labeling double stranded or single stranded nucleic acid or detecting
CC single nucleotide polymorphisms. The present sequence was used to
XX illustrate the method of the invention.
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 377
AED75672/C
ID AED75672 standard; DNA; 21 BP.
XX
XX AED75672;
XX
XX 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 881.
DE
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohns disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss; phosphorothioate.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
PT to augment T-helper1 cells like immune activation and to treat non-
PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 881; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
CC (Th1)-like immune activation in a subject. The method comprises
CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
CC immune activation; and administering a cyclooxygenase inhibitor (II) to
CC inhibit prostaglandin expression, is new. The present sequence is one
CC such immunostimulatory nucleic acid. (I) is useful for treating non-
CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
CC contact dermatitis or latex dermatitis.

```

XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 378
AEF40261
ID AEF40261 standard; cDNA; 21 BP.
XX AC AEF40261;
XX DT 23-MAR-2006 (first entry)
XX DE Poly A DNA sequence #1.
XX KW DNA amplification; DNA sequencing; gene expression; drug discovery;
XX KW diagnosis; forensic; ss.
XX OS Unidentified.
XX PN WO2006003721-A1.
XX PD 12-JAN-2006.
XX PF 02-JUL-2004; 2004WO-JP009862.
XX PR 02-JUL-2004; 2004WO-JP009862.
XX PA (DNAAF-) DNAAFOM KK.
XX PI Harbers M, Shibata Y;
XX WPI; 2006-100543/10.
XX PT Preparing DNA fragments comprising sequences corresponding to two
XX opposite end regions of linear nucleic acid, for e.g. analysis, comprises
XX ligating linkers, circularizing, and digesting.
XX PS Disclosure; Fig 1; 70pp; English.
XX CC The new invention relates to preparing DNA fragments comprising sequences
XX corresponding to two opposite end regions of a linear nucleic acid
XX molecule, by creating a linear DNA molecule from a nucleic acid molecule,
XX ligating linkers to two opposite ends of the linear DNA molecule,
XX circularizing the linear DNA molecule, digesting the circular DNA
XX molecule with a restriction endonuclease, and isolating the DNA fragment.
XX Also described are a vector pGSC; obtaining (M2) information on the end
XX sequences of a linear nucleic acid, comprising preparing DNA fragments by
XX (M1), preparing a concatemer by ligating the DNA fragments with each
XX other, and sequencing the concatemer so as to obtain information on the
XX end sequences of the linear nucleic acid; and priming (M3) a reverse
XX transcription reaction, by: preparing a double-stranded linker having a
XX single-stranded overhanging region, where the single-stranded overhanging
XX region is complementary to the 3' end sequence of the RNA; hybridizing
XX the single-stranded overhanging region to the complementary 3' end
XX sequence of the RNA so as to ligate the double-stranded linker to the 3'
XX end of the RNA; and letting the free 3'-end of the overhanging region of
XX the linker prime a reverse transcription reaction over the RNA with a
XX reverse transcriptase. (M1) is useful for analysis of fragments for the
XX purpose of gene identification and expression profiling and for studies
XX on biological system, characterization of genetic elements and analysis
XX the expressed genes. The identified DNA fragments are useful in drug
XX development, diagnostics or forensic studies. The present sequence is a
XX poly A DNA sequence, shown in figure 1 showing the first strand cDNA
XX priming and poly-A tail removal.

```

```

SQ Sequence 21 BP; 21 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAAAAAAAAAAAAAA 21

RESULT 379
AAQ30432/C
ID AAQ30432 standard; DNA; 23 BP.
XX AC AAQ30432;
XX DT 25-MAR-2003 (revised)
XX DT 07-DEC-1992 (first entry)
XX DE Oligomer IL6805 for forming triplex with HUMIL6 target duplex.
XX KW Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
XX KW malignancy; hepatitis; inflammation; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
FT misc_feature 11..12
FT /*tag= d
FT /note= "o-xyloso dimer synthon linkage"
FT misc_feature 12..23
FT /*tag= c
FT /label= inverted polarity_region
FT /note= "see comments"
FT modified_base 23
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
XX PN WO9209705-A1.
XX PD 11-JUN-1992.
XX PF 25-NOV-1991; 91WO-US008811.
XX PR 23-NOV-1990; 90US-00617907.
XX PR 18-JAN-1991; 91US-00643382.
XX PR 08-APR-1991; 91US-00683420.
XX PR 17-APR-1991; 91US-00686544.
XX PR 17-APR-1991; 91US-00686546.
XX PR 17-APR-1991; 91US-00686547.
XX PR 27-SEP-1991; 91US-00766733.
XX (GILB-) GILEAD SCI INC.
XX PA Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX PI WPI; 1992-217083/26.
XX DR New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX PS Claim 12; Page 71; 77pp; English.
XX CC The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human

```

CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
 CC concd. on one strand of the duplex. The oligomer, and others like it are
 CC useful in diagnosis and therapy of diseases characterised by specific DNA
 CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
 CC tumours and inflammation. The triple helices form under mild conditions
 CC such assays may be carried out without subjecting the test specimen to
 CC harsh conditions. The oligomer contains an inverted polarity region
 CC formed from an o-xylosa dimer synthon. The linking gp. is o-xylosa
 CC (nucleotides have the 3' positions of xylose sugars linked via the o-
 CC xylene ring). Two nucleotides are coupled through a xylene residue to
 CC form the dimer synthon. This additional modifications may render the
 CC oligomer stable to nuclease activity. The oligomer is able to inhibit
 CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 23 BP; 0 A; 2 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 6.4e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 380
 AAA29753/c
 ID AAA29753 standard; DNA; 23 BP.

AC AAA29753;

XX 15-AUG-2000 (first entry)

DE Synthetic oligonucleotide #1.

XX Primer; destabilise non-specific duplex formation; PCR; detection;
 KW purification; sequencing; genetic marker; RACE; DNA synthesis; ss.

XX Synthetic.

Key Location/Qualifiers
 FT modified_base 8 /*tag= a
 FT /mod_base= i
 FT /note= "inosine"
 FT modified_base 18
 FT /*tag= b
 FT /mod_base= i
 FT /note= "inosine"

XX WO200020630-A1.

XX 13-APR-2000.

XX 06-OCT-1999; 99WO-CA000933.

XX 07-OCT-1998; 98CA-02246623.

XX (UYMC-) UNIV MCGILL.

XX Pelletier J, Das M;

XX WPI; 2000-328943/28.

XX Novel method of stabilizing duplex formation, or destabilizing non-
 PT specific duplex formation using primer containing modified nucleotide
 PT analogs, useful for preventing mispriming during PCR, RACE, DNA synthesis
 PT or sequencing.

XX Example 1; Page 25; 46pp; English.

XX The present invention describes a method for destabilising non-specific

CC duplex formation, between an oligonucleotide and a target nucleic acid
 CC (NA), comprising incubating the target NA with a modified oligonucleotide
 CC (1) comprising a homopolymeric sequence having a modification which
 CC decreases or abrogates H-bonding between the modified oligonucleotide and
 CC the non-specific target NA. The modified oligonucleotide is used to
 CC improve discrimination between the targeted homopolymeric sequence and a
 CC non-homopolymeric target sequence. It is used to increase the proportion
 CC of full length cDNA clones for a library, to reduce mispriming during
 CC sequencing, 5' or 3' RACE (rapid amplification of cDNA ends) or DNA
 CC synthesis or to generate bona fide genetic markers. The present sequence
 CC represents an oligonucleotide which is used in the exemplification of the
 CC present invention

XX Sequence 23 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 2 Other;

Query Match 0.8%; Score 21; DB 1; Length 23;
 Best Local Similarity 91.3%; Pred. No. 6.4e+02;
 Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731

Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 381

ABK86169

ID ABK86169 standard; DNA; 24 BP.

XX ABK86169;

XX 24-SEP-2002 (first entry)

DE Oligo dT primer #2 used in method to study gene expression.

XX Oligo dT primer; gene expression analysis; primer; ss.

XX Synthetic.

XX WO200236828-A2.

XX 10-MAY-2002.

XX 01-NOV-2001; 2001WO-US045401.

XX 01-NOV-2000; 2000US-0244933P.

XX (GENO-) GENOMIC SOLUTIONS INC.

XX Kane MD, Dombkowski AA, Nagel AC;

XX WPI; 2002-508123/54.

XX Identifying and characterizing gene expression in samples, for
 PT identifying mRNAs expressed at different levels, comprises employing an
 PT identifier having a oligo-dT primer of a specific sequence and a
 PT detectable marker at its 5' end.

XX Disclosure; Page 11; 45pp; English.

XX The invention relates to systems for identification and characterisation
 CC of gene expression in one or more samples, comprising an identifier having
 CC a specific oligo-dT primer sequence, where the identifier comprises a
 CC detectable marker at its 5' end. The system is useful for identifying any
 CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
 CC as the relative differences in mRNA between 2 or more samples where
 CC desired, for supporting discovery of new genes, and for identifying mRNAs
 CC that are expressed at different levels between 2 or more samples. The new
 CC system or method addresses limitations of prior methods by comprising
 CC compositions and systems that incorporate new strategies where molecular
 CC or biochemical assay compositions and systems are linked to DNA or RNA
 CC sequence databases for optimal resource efficiency in assaying gene
 CC expression. The system has the following advantages over existing
 CC methods: (a) prior sequence information or clone library construction is

CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences
 CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence in formation. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX
 XX SQ Sequence 24 BP; 20 A; 0 C; 1 G; 3 T; 0 U; 0 Other;
 Query Match 0.8%; Score 21; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 6.5e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 4 TAAAAAAAAAAAAAAAAAAAAA 24

RESULT 382
 ABK86168/c
 ID ABK86168 standard; DNA; 24 BP.
 AC ABK86168;
 XX
 XX 24-SEP-2002 (first entry)
 DT
 DE Oligo dT primer #1 used in method to study gene expression.
 XX
 XX Oligo dT primer; gene expression analysis; primer; ss.
 KW
 XX Synthetic.
 OS
 XX
 XX WO200236828-A2.
 PN
 PD 10-MAY-2002.
 XX
 XX 01-NOV-2001; 2001WO-US045401.
 PF
 XX 01-NOV-2000; 2000US-0244933P.
 PR
 XX (GENO-) GENOMIC SOLUTIONS INC.
 PA
 XX Kane MD, Dombkowski AA, Nagel AC;
 PI
 XX WPI; 2002-508123/54.
 DR
 XX
 XX Identifying and characterizing gene expression in samples, for
 FT identifying mRNAs expressed at different levels, comprises employing an
 PT identifier having an oligo-dT primer of a specific sequence and a
 PT detectable marker at its 5' end.
 XX
 XX Disclosure; Page 11; 45pp; English.
 PS
 XX The invention relates to systems for identification and characterisation
 CC of gene expression in one or more samples, comprising an identifier having
 CC a specific oligo-dT primer sequence, where the identifier comprises a
 CC detectable marker at its 5' end. The system is useful for identifying any
 CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
 CC as the relative differences in mRNA between 2 or more samples, where
 CC desired, for supporting discovery of new genes, and for identifying mRNAs
 CC that are expressed at different levels between 2 or more samples. The new
 CC system or method addresses limitations of prior methods by comprising
 CC compositions and systems that incorporate new strategies where molecular
 CC or biochemical assay compositions and systems are linked to DNA or RNA
 CC sequence databases for optimal resource efficiency in assaying gene
 CC expression. The system has the following advantages over existing
 CC methods: (a) prior sequence information or clone library construction is
 CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences

CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence in formation. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX
 XX SQ Sequence 24 BP; 3 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.8%; Score 21; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 6.5e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 21 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 383
 AAD26899
 ID AAD26899 standard; DNA; 26 BP.
 XX
 XX AAD26899;
 AC
 XX 09-APR-2002 (first entry)
 DT
 DE Bacterial PNP DNA fragment with an out-of-frame polyA tract.
 XX
 XX Hypermutable organism; dominant negative allele; mismatch repair gene;
 KW spontaneous mutation; DNA repair; purine nucleotide phosphorylase; PNP;
 XX bacteria; ss.
 XX
 XX Bacteria.
 OS Unidentified.
 OS Chimeric.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 1..5
 FT /tag= a
 FT /note= "Bacterial PNP gene"
 FT misc_feature 6..26
 FT /tag= a
 FT /note= "Out-of-frame polyA tract"
 FT
 XX WO200188192-A2.
 XX
 XX 22-NOV-2001.
 PD
 XX 14-MAY-2001; 2001WO-US015376.
 PF
 XX 17-MAY-2000; 2000US-0204769P.
 PR
 XX (UYJO) UNIV JOHNS HOPKINS.
 PA (MORE-) MORPHOTEK INC.
 PA (NICO/) NICOLAIDES N C.
 PA (SASS/) SASS P M.
 PA (GRAS/) GRASSO L.
 PA (VOGE/) VOGELSTEIN B.
 PA (KINZ/) KINZLER K W.
 XX
 XX Nicolaides NC, Sasse PM, Grasso L, Vogelstein B, Kinzler KW;
 PI WPI; 2002-083004/11.
 DR
 XX Generating mutation in gene using cells which contain defective mismatch
 PT repair gene, useful to generate genetically altered mutations with new
 PT output traits.
 XX
 XX Example 5; Fig 7; 59pp; English.
 PS
 XX The patent discloses a method for generating hypermutable organisms.
 CC

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CC Dominant negative alleles of human mismatch repair genes can be used to
CC generate hypermutable cells and organisms. They increase the rate of
CC spontaneous mutations by reducing the effectiveness of DNA repair and
CC thereby render the cells or animals hypermutable. The method is used to
CC produce genetically altered organisms to produce new output traits. The
CC present sequence is a bacterial poly purine nucleotide phosphorylase
CC (polyPNP) DNA fragment containing an out-of-frame polyA tract. This
CC sequence is used in the exemplification of the invention
XX
SQ Sequence 26 BP; 22 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 6 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 384
AAD39650
ID AAD39650 standard; DNA; 26 BP.
XX
AC AAD39650;
XX
DT 22-OCT-2002 (first entry)
XX
DE PolyPNP out-of-frame polyA tract DNA.
XX
KW Dominant negative allele; mismatch repair gene; D-WMR; gene discovery;
KW ITRF; inducible transcriptional regulatory element;
KW recombinant gene mutagenesis; recombinant protein production;
KW drug target discovery; ds.
XX
OS Unidentified.
XX
PN US2002055106-A1.
XX
PD 09-MAY-2002.
XX
PF 14-MAY-2001; 2001US-00853646.
XX
PR 12-MAY-2000; 2000US-0203905P.
PR 17-MAY-2000; 2000US-0204769P.
XX
PA (NICO/) NICOLAIDES N C.
PA (SASS/) SASS P M.
PA (GRAS/) GRASSO L.
PA (VOGE/) VOGELSTEIN B.
PA (KINZ/) KINZLER K W.
XX
PI Nicolaides NC, Sass PM, Grasso L, Vogelstein B, Kinzler KW;
XX
DR WPI; 2002-499469/53.
XX
XX Generating a mutation in a gene using a dominant negative allele of a
XX mismatch repair gene which results in mismatch repair deficiency in cells
XX containing the allele is useful in gene and drug target discovery and
XX recombinant technology.
XX
XX Example 5; Fig 7; 25pp; English.
XX
XX The invention relates to methods for generating a mutation in a gene of
XX interesting using a dominant negative allele of a mismatch repair gene (D
XX -WMR) under control of an inducible transcriptional regulatory element
XX (ITRE). The invention is useful to provide new cell lines that can be
XX used for gene discovery, drug target discovery, recombinant gene
XX mutagenesis or recombinant protein production. The present sequence is a
XX polyPNP (purine phosphorylase) out-of-frame polyA tract DNA
XX
SQ Sequence 26 BP; 22 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
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```
Query Match 0.8%; Score 21; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 6 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 385
ADX9060/c
ID ADX99060 standard; DNA; 26 BP.
XX
AC ADX99060;
XX
DT 05-MAY-2005 (first entry)
XX
DE Extend primer 57 used to genotype human ICAM region SNP DNA.
XX
KW SNP detection; breast tumor; endocrine disease;
KW gynecology and obstetrics; neoplasm; cytostatic; metastasis;
KW gene therapy; RNA interference; intercellular adhesion molecule; ICAM1;
KW ICAM4; ICAM5; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN WO2005014846-A2.
XX
PD 17-FEB-2005.
XX
PF 27-MAY-2004; 2004WO-US016939.
XX
PR 24-JUL-2003; 2003US-0490234P.
PR 25-NOV-2003; 2003US-00723681.
PR 25-NOV-2003; 2003US-0525239P.
XX
PA (SEQU-) SEQUENOM INC.
XX
PI Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
PI Hoyal-Wrightson CR;
XX
DR WPI; 2005-163257/17.
XX
PT Identifying risk of, preventing and/or treating breast cancer by
PT identifying and/or analyzing polymorphic variations in nucleotide
PT sequences within the human genome.
XX
XX Example 4; Page 106; 617pp; English.
XX
XX The invention relates to a novel method for identifying a subject at risk
XX of breast cancer comprising detecting the presence or absence of a
XX polymorphic variation associated with breast cancer. The method of the
XX invention demonstrates cytostatic activity and may be useful for
XX identifying a risk of, preventing and/or treating breast cancer and
XX cancer metastasis. The methods may be utilized for gene therapy or RNA
XX interference. The current sequence is that of an Extend primer of the
XX invention which was used to genotype a human intercellular adhesion
XX molecule (ICAM1, ICAM4, ICAM5) region single nucleotide polymorphism
XX (SNP).
XX
SQ Sequence 26 BP; 0 A; 3 C; 2 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 26 AAAAAAAAAAAAAAAAAAAAAA 6

RESULT 386
AAH24266/c
```

ID AAH24266 standard; DNA; 24 BP.
 AC AAH24266;
 XX
 DT 11-SEP-2001 (first entry)
 XX
 DE Human phosphatase 79 RT-PCR primer, SEQ ID NO:4.
 XX
 KW Phosphatase 79; human; BAC clone CTB-54D4-encoded protein homologue;
 KW recombinant production; malignant tumour; cancer; blood disease;
 KW HIV infection; human immunodeficiency virus; immune disorder;
 KW inflammatory condition; cytostatic; anti-HIV; antiinflammatory;
 KW immunomodulator; reverse transcription-PCR; RT-PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200138385-A1.
 XX
 PD 31-MAY-2001.
 XX
 PF 20-NOV-2000; 2000WO-CN0000459.
 XX
 PR 22-NOV-1999; 99CN-00124059.
 XX
 XX (BIOR-) BIORAD GENE DEV LTD SHANGHAI.
 PA
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2001-355903/37.
 XX
 PT Human phosphatase 79 and encoded polynucleotide, applicable in diagnosis
 PT and treatment of malignant tumor, hemopathy, HIV infection, immunological
 PT diseases and various inflammation.
 XX
 PS Example 3; Page 12; 38pp; Chinese.
 XX
 CC The invention relates to human phosphatase 79 (AAB73700), nucleic acids
 CC encoding it (AAH24264), and a method for the recombinant production of
 CC human phosphatase 79. The present invention additionally discloses an
 CC agonist of phosphatase 79 for therapeutic use, and an antibody which
 CC specifically binds to human phosphatase 79. Human phosphatase 79, and
 CC nucleotides which encode it may be used for treating a variety of
 CC diseases, such as malignant tumours, blood diseases, HIV (human
 CC immunodeficiency virus) infection, immune disorders and inflammatory
 CC conditions. The protein may also be used to screen for modulators of its
 CC activity or for peptide fingerprinting identification. The polynucleotide
 CC can be used as a primer for nucleic acid amplification reaction or as a
 CC probe for hybridisation reactions, or in producing gene chips or
 CC microarrays. Sequences AAH24265-AAH24266 represent reverse transcription-
 CC PCR (RT-PCR) primers used in an exemplification of the invention to
 CC isolate human phosphatase 79 cDNA
 XX
 SQ Sequence 24 BP; 2 A; 0 C; 0 G; 22 T; 0 U; 0 Other;
 Query Match 0.8%; Score 20.8; DB 1; Length 24;
 Best Local Similarity 91.7%; Pred. No. 6.7e+02;
 Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAAATAA 1
 RESULT 387
 ABL55130/C
 ID ABL55130 standard; DNA; 24 BP.
 XX
 AC ABL55130;
 XX
 DT 31-MAY-2002 (first entry)
 XX
 DE Human gonadotropin-releasing hormone 10 RT-PCR primer, SEQ ID NO:4.
 XX

KW Human; gonadotropin-releasing hormone 10; recombinant production; cancer;
 KW HIV infection; human immunodeficiency virus; gene therapy; cytostatic;
 KW anti-HIV; reverse transcription-PCR; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN CN1325900-A.
 XX
 PD 12-DEC-2001.
 XX
 PF 31-MAY-2000; 2000CN-00116266.
 XX
 PR 31-MAY-2000; 2000CN-00116266.
 XX
 XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 PA
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-196660/26.
 XX
 PT Polypeptide-human gonadotropin-releasing hormone 10 and polynucleotide
 PT encoding it.
 XX
 PS Example 2; Page 17 (Disclosure); 32pp; Chinese.
 XX
 CC The invention relates to human gonadotropin-releasing hormone 10
 CC (AAM49158) and to nucleic acids encoding it (ABL55128). The protein has a
 CC molecular weight of 10 kD. The invention also relates to a method for the
 CC recombinant production of the protein, an antagonist of the protein, and
 CC the use of the protein, gene and antagonist in therapeutic applications.
 CC Gonadotropin-releasing hormone 10 can be used in the treatment of a
 CC variety of diseases such as cancer and HIV (human immunodeficiency virus)
 CC infection. Sequences ABL55129-ABL55130 represent reverse transcription-
 CC PCR (RT-PCR) primers used in an exemplification of the invention to
 CC isolate human gonadotropin-releasing hormone 10 cDNA
 XX
 SQ Sequence 24 BP; 1 A; 1 C; 3 G; 19 T; 0 U; 0 Other;
 Query Match 0.8%; Score 20.8; DB 1; Length 24;
 Best Local Similarity 91.7%; Pred. No. 6.7e+02;
 Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2704 GTACTTAAAAAAAAAAAAAAAAAAAA 2727
 DB 24 GTCCCCAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 388
 ADY03038/C
 ID ADY03038 standard; DNA; 26 BP.
 XX
 AC ADY03038;
 XX
 DT 05-MAY-2005 (first entry)
 XX
 DE Extend primer 488 used to genotype human DPf3 SNP DNA.
 XX
 KW SNP detection; breast tumor; endocrine disease;
 KW gynecology and obstetrics; neoplasm; cytostatic; metastasis;
 KW gene therapy; RNA interference; ss; PCR; primer;
 KW D4, zinc and double PHD fingers, family 3; DPf3;
 KW guanine-nucleotide exchange factor.
 XX
 OS Homo sapiens.
 XX
 PN WO2005014846-A2.
 XX
 PD 17-FEB-2005.
 XX
 PF 27-MAY-2004; 2004WO-US016939.
 XX
 PR 24-JUL-2003; 2003US-0490234P.
 PR 25-NOV-2003; 2003US-00723681.

```
PR 25-NOV-2003; 2003US-0525239P.
XX (SEQU-) SEQUENOM INC.
XX
XX Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX Hoyal-Wrightson CR;
XX WPI; 2005-163257/17.
XX
XX Identifying risk of, preventing and/or treating breast cancer by
XX identifying and/or analyzing polymorphic variations in nucleotide
XX sequences within the human genome.
XX
XX Example 16; Page 261; 617pp; English.
XX
XX The invention relates to a novel method for identifying a subject at risk
XX of breast cancer comprising detecting the presence or absence of a
XX polymorphic variation associated with breast cancer. The method of the
XX invention demonstrates cytostatic activity and may be useful for
XX identifying a risk of, preventing and/or treating breast cancer and
XX cancer metastasis. The methods may be utilized for gene therapy or RNA
XX interference. The current sequence is that of an Extend primer of the
XX invention which was used to genotype a human rho-family guanine-
XX nucleotide exchange factor D4, zinc and double PHD fingers, family 3
XX (DPF3) single nucleotide polymorphism (SNP).
XX
XX Sequence 26 BP; 0 A; 3 C; 1 G; 22 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 20.8; DB 1; Length 26;
Best Local Similarity 91.7%; Pred. No. 6.9e+02;
Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 26 AAAAAAAAAAAAAAAAAAGAGAAAA 3

RESULT 389
ADG75918/c
ID ADG75918 standard; DNA; 24 BP.
XX
XX AC
XX ADG75918;
XX
XX 11-MAR-2004 (first entry)
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 173 SeqID 20.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
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XX Claim 14; SEQ ID NO 20; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primate, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoral disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20.4; DB 1; Length 24;
Best Local Similarity 95.5%; Pred. No. 7.1e+02;
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 24 AAAAAAAAAAAAAAAAAACAAAA 3

RESULT 390
ABZ23535
ID ABZ23535 standard; DNA; 25 BP.
XX
XX AC ABZ23535;
XX
XX 07-APR-2003 (first entry)
XX
XX fragment of a plasmid used to detect somatic instability.
XX
XX Replication error; drug development; somatic instability; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 4
XX /tag= a
XX /note= "this base represents an unspecified number of
XX bases"
XX 22
XX misc_feature 22
XX /tag= b
XX /note= "this base represents an unspecified number of
XX bases"
XX
XX WO200295071-A2.
XX
XX 28-NOV-2002.
XX
XX 22-MAY-2002; 2002WO-NL000322.
XX
XX 22-MAY-2001; 2001EP-00201936.
XX
XX (NEUW-) KONINK NEDERLANDSE AKAD VAN WETENSCHAPPE.
XX (TIJUS/) TIJSTERMAN M.
XX
XX Plasterk RHA, Tijsterman M;
XX
XX WPI; 2003-129440/12.
XX
XX Determining whether a product of a gene is involved in preventing a
XX replication error in a cell comprises providing a specific inhibitor for
XX the product and determining the level of expression of a marker gene.
XX
```

PS Example 1; Fig 3; 47pp; English.

CC The specification describes a method for determining whether a product of a gene is involved in preventing a replication error in a cell. The method comprises providing the cell with a specific inhibitor for the product and determining the level of functional expression of a marker gene in the cell, where the level of expression of the marker gene is dependent on the occurrence of the replication error. The method is used for determining whether a product of a gene is involved in preventing a replication error in a cell. The identified genes are useful for developing diagnostic tools, or as targets for drug development to manipulate cells on the basis of the presence or absence of function of the gene. AB223535-36 represents fragments of plasmids used to detect somatic instability, in the course of the invention

XX SQ Sequence 25 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.4; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 7.2e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2708 TAAAAA 2731
Db 2 TGNAAAAA 25

RESULT 391
ADR44220
ID ADR44220 standard; DNA; 25 BP.
XX AC ADR44220;
XX DT 04-NOV-2004 (first entry)
XX DE Caenorhabditis elegans heat-shock promoter DNA #1.
XX KW Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
XX OS Caenorhabditis elegans.
XX FH Key Location/Qualifiers
FT misc_feature 4 /*tag= a
FT /*note= "N can be repeated X times"
FT 22
FT misc_feature /*tag= b
FT /*note= "N can be repeated Y times"
XX FT
XX DN US2004161782-A1.
XX PD 19-AUG-2004.
XX PF 21-NOV-2003; 2003US-00719995.
XX PR 22-MAY-2001; 2001EP-00201936.
XX PR 22-MAY-2002; 2002WO-NL000322.
XX PR 28-NOV-2002; 2002WO-WO095071.
XX (TIJS/) TIJSTERMAN M.
XX (PLAS/) PLASTERK R H A.
XX Tijsterman M, Plasterk RHA;
XX WPI; 2004-603554/58.
XX
XX Determining if a gene product/compound is involved in preventing replication error in a cell, useful for treating cancer, comprises determining expression level of a marker gene in a cell treated with a gene product inhibitor/compound.
XX
XX Disclosure; Fig 3; 25pp; English.
XX The present invention relates to a method for determining if a gene

CC product or compound is involved in preventing replication error in a cell. The method involves providing a cell with a specific inhibitor for a gene product or with a compound and determining the expression level of a marker gene in the cell, where the expression level of the marker gene is dependent on the occurrence of a replication error. The invention is useful in gene therapy and for treating a subject having tumours or cancer. The present sequence is a Caenorhabditis elegans heat-shock promoter DNA. This sequence is used to illustrate the method of CC invention.

XX SQ Sequence 25 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.4; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 7.2e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2708 TAAAAA 2731
Db 2 TGNAAAAA 25

RESULT 392
AAL50570/C
ID AAL50570 standard; DNA; 22 BP.
XX AC AAL50570;
XX DT 12-DEC-2002 (first entry)
XX DE Molecular array production method-related PCR primer.
XX KW Molecular array; ss; target molecule identification; genetic analysis; gene expression; SNP detection; haplotyping; sequencing; PCR; primer.
XX OS Unidentified.
XX PN WO200274988-A2.
XX PD 26-SEP-2002.
XX PF 18-MAR-2002; 2002WO-GB001245.
XX PR 16-MAR-2001; 2001GB-00006635.
XX PR 02-AUG-2001; 2001GB-00018879.
XX PA (UYCH-) UNIV CHANCELLOR MASTER & SCHOLARS OXF.
XX PI Mir K;
XX WPI; 2002-732872/79.
XX
XX Producing a molecular array with a plurality of molecules immobilized to a solid substrate, useful in genetic analysis, gene expression studies or the detection or typing of single nucleotide polymorphisms in a sample of nucleic acids.
XX Example 15; Page 122; 166pp; English.
XX
XX The invention comprises a method for producing a molecular array, the method involves immobilising molecules to a solid phase at a density which allows individual immobilised molecules to be individually resolved. The molecular array produced by the method of the invention is useful for identifying one or more target molecules in a sample. The molecular array is also useful in genetic analysis, gene expression studies, identifying molecules which interact with a target molecule, detection/typing of single nucleotide polymorphisms, haplotyping and CC sequencing. The present DNA sequence represents a PCR primer that was used in an example of the invention
XX
XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;

```

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 393
ACC48484/C
ID ACC48484 standard; DNA; 22 BP.
XX AC ACC48484;
XX DT 11-AUG-2003 (first entry)
XX DE Locked nucleic acid anchored oligo(I) primer ON14.
XX KW Locked nucleic acid; LNA; gene therapy; primer; ss.
XX OS Synthetic.
XX FH Key
FT modified_base 1. 21
FT /tag= m
FT /mod_base= um
FT /note= "2'-O-methyluridine"
FT modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 3
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 5
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 7
FT /tag= d
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 9
FT /tag= e
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 11
FT /tag= f
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 13
FT /tag= g
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 15
FT /tag= h
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 17
FT /tag= i
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 19
FT /tag= j
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 21
FT /tag= k
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 22
FT /tag= l
FT /mod_base= OTHER

/Note= "OTHER= Compound 17d"
WO2003020739-A2.
13-MAR-2003.
04-SEP-2002; 2002WO-IB003911.
04-SEP-2001; 2001US-0317034P.
22-SEP-2001; 2001US-0323967P.
(EXIQ-) EXIQON AS.
Wengel J, Kauppinen S;
WPI; 2003-363021/34.
Novel nucleic acid comprising a locked nucleic acid unit having a
modified base that comprises an optionally substituted carbocyclic aryl
moiety, or modified nucleobase or nucleosidic base other than
oxazole/imidazole.
Example 24a; Page 90; 119pp; English.
The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
oligo(dT) primer ON14, which was used in first-strand cDNA synthesis from
eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moiety. It is
one of a set of such primers (see also ACC48482-85) that were used in an
example from the invention to demonstrate improved reverse transcription
of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
were observed: efficient priming on mRNAs with short poly(A) tails;
efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
units resulting in an improved T20-VN anchor primer and thus avoiding
reverse transcription of long poly(A) tracts; and improved reverse
transcription of eukaryotic poly(A)+RNA directly from total RNA extracts
due to increased specificity. The invention relates to modified LNA units
that comprise unique base groups. Desirable nucleobase and nucleosidic
base substitutions can mediate universal hybridisation when incorporated
into nucleic acid strands. The novel LNA compounds can be used e.g. as
PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
and in diagnostics
XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 394
ACC48485/C
ID ACC48485 standard; DNA; 22 BP.
XX AC ACC48485;
XX DT 11-AUG-2003 (first entry)
XX DE Locked nucleic acid anchored oligo(I) primer ON15.
XX KW Locked nucleic acid; LNA; gene therapy; primer; ss.
XX OS Synthetic.
XX FH Key
FT modified_base 21
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"

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SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 396
AAD51324/C
ID AAD51324 standard; DNA; 22 BP.
XX
AC AAD51324;
XX
XX 16-APR-2003 (first entry)
XX
XX Anchored oligo dT primer used to illustrate the method of the invention.
XX
XX Laminitis; viral disease; vaccine; bacterial disease; primer; epistaxis;
KW gastritis; gastric ulcer; respiratory ailment; fracture; joint disease;
KW musculoskeletal damage; ss.
XX
XX Unidentified.
XX
XX WO200290579-A1.
XX
XX 14-NOV-2002.
XX
XX 03-MAY-2002; 2002WO-AU000553.
XX
XX 04-MAY-2001; 2001AU-00004809.
XX
XX 29-JUN-2001; 2001US-00896941.
XX
XX (GENO-) GENOMICS RES PARTNERS PTY LTD.
XX
XX Brandon RB;
XX
XX WPI; 2003-120558/11.
XX
XX Assessing condition e.g. athletic ability, stage of disease, presence of
PT drugs, response to exercise, response to vaccines, therapies, nutritional
PT states, of performance animal involves analyzing nucleic acid expression.
XX
XX Disclosure; Page 46; 87pp; English.
XX
XX The invention relates to a method for assessing a condition of a
CC performance animal. The method involves determining in sample abundance
CC of expressed target nucleic acid; transmitting digital sample signal to
CC remote diagnostic server; processing digital sample signal at remotely
CC located database to correlate digital signal with digital information and
CC returning report of particular condition of animal. The method is useful
CC for assessing a condition of a performance animal preferably human, dog
CC or camel. The condition can be an athletic ability and a condition that
CC enhances, hinders, impedes or does not change an expected ability of the
CC performance animal; and also normal, pre-clinical, overt progress and/or
CC stage of disease, undiagnosed of unclassified conditions, presence of
CC drugs, response to exercise, response to vaccines, therapies, nutritional
CC states and response to environmental conditions. Diseases assessed by the
CC invention include laminitis, lameness, viral or bacterial disease,
CC gastritis, gastric ulcers, respiratory ailments, fractures, epistaxis,
CC musculoskeletal damage or disorders and joint diseases. The present
CC sequence is a primer used to illustrate the method of the invention
XX
XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728

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Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 397
AAD64451/C
ID AAD64451 standard; DNA; 22 BP.
XX
AC AAD64451;
XX
XX 12-FEB-2004 (first entry)
XX
XX Human RP-11-336A10 clone specific primer.
XX
XX Sequence presentation; human; chromosome 10; primer; ss.
XX
XX Homo sapiens.
XX
XX US2003190648-A1.
XX
XX 09-OCT-2003.
XX
XX 09-DEC-2002; 2002US-00314321.
XX
XX 05-APR-2002; 2002JP-00103333.
XX
XX (HITA ) HITACHI LTD.
XX
XX Hosoiri T, Yokoi T, Wagatsuma M;
XX
XX WPI; 2003-864174/80.
XX
XX Presenting partial sequences by predicting and extracting exon sequences
PT from a database, is useful to prepare primers to obtain a cDNA clone of a
PT total coding region from a partial sequence of an unidentified gene
PT sequence.
XX
XX Example 4; SEQ ID NO 56; Opp; English.
XX
XX The invention relates to methods and system for sequence presentation.
CC The method involves extracting a partial sequence corresponding to a
CC partial sequence of a target gene having an unidentified sequence, by
CC homology search on a database. The methods are useful for presentation of
CC sequences. It is also useful to prepare primer sequences to obtain a cDNA
CC clone of a total coding region from a partial sequence of a gene having
CC an unidentified sequence. The present sequence is a primer specific for
CC human chromosome 10 RP-11-336A10 clone DNA. This sequence is used to
CC illustrate the method of the invention
XX
XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 398
ABX74887/C
ID ABX74887 standard; DNA; 22 BP.
XX
AC ABX74887;
XX
XX 21-MAR-2003 (first entry)
XX
XX Oligo-dT primer used in human CC-RCC invention.
XX
XX Microarray; solid surface; immobilised probe; CC-RCC;
KW differential expression profile; aggressive CC-RCC tumour type;
KW non-aggressive CC-RCC tumour type; clear cell renal carcinoma;

```

gene expression profiling; tumour tissue; oligo-dt; primer; ss.

Synthetic.

WO200279411-A2.

10-OCT-2002.

29-MAR-2002; 2002WO-US009576.

29-MAR-2001; 2001US-0279411P.

(VAND-) VAN ANDEL INST.

Haab B, Rhodes D, Teh BT, Takashi M;

WPI; 2003-040679/03.

New microarray, comprising a matrix of cDNA probe from a set of probes immobilized to a solid surface in predetermined order, useful in the prognosis of patients with clear cell renal carcinoma.

Example 2; Page 30; 179pp; English.

The present invention relates to a microarray comprising a matrix of at least one cDNA probe from a set of probes immobilised to a solid surface in a predetermined order, where a row of pixels corresponds to replicates of one distinct probe from the set. The probes are complementary to nucleic acid sequences that are expressed differentially in aggressive as compared to non-aggressive types of clear cell renal carcinoma (CC-RCC) and that hybridise to the probes under high stringency conditions. The microarray is useful for the prognosis of patients with CC-RCC, wherein aggressive and non-aggressive CC-RCC tumour types are characterised by differential expression profiles of genes that hybridise with one or more probes immobilised on the microarray. The arrays are useful for gene expression profiling of tumour and normal tissues. The present sequence represents an oligo-dt primer used in the examples of the present invention

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02;

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

2708 TAAAAAAAAAAAAAAAAAAAAA 2728

:|||||

21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 399

ADI34007/C

ID ADI34007 standard; DNA; 22 BP.

AC ADI34007;

22-APR-2004 (first entry)

RNA extraction anchored oligonucleotide primer.

ss; cancer; neuroblastoma; rhabdomyosarcoma; Burkitt's tumour family; Ewing tumour family; primer.

Synthetic.

US2004009154-A1.

15-JAN-2004.

31-MAY-2002; 2002US-00159563.

25-APR-2002; 2002US-00133937.

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SQ

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match

Best Local Similarity

Matches

20; Conservative

1; Mismatches

0; Indels

0; Gaps

0;

2708 TAAAAAAAAAAAAAAAAAAAAA 2728

:|||||

21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 400

ADL97794/C

ID ADL97794 standard; DNA; 22 BP.

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(KHAN/) KHAN J.

(RING/) RINGNER M.

(PETE/) PETERSON C.

(MELT/) MELTZER P.

Khan J, Ringner M, Peterson C, Meltzer P;

WPI; 2004-167702/16.

Selecting genes expressed in cancer cell, by characterizing cancer based

on functioning of gene selection by comparing expression of selected gene

from cancer cell with expression of selected genes from noncancerous

cell.

Example 2; Page 18; 53pp; English.

The invention relates to a method of selecting genes expressed in a

cancer cell, which involves characterising cancer based on the

functioning of gene selection by comparing the expression of the selected

gene from the cancer cell with the expression of an identical selection

of genes from a noncancerous cell or different type of cancer cell. The

method is useful for selecting genes expressed in a cancer cell. The

method is useful for targeting the therapy of cancer by using a selection

of genes or their products expressed in a cancer cell, the gene selection

or a selection of product functioning to characterising cancer by

comparing the expression of the selected gene or their products from the

cancer cell with the expression of an identical selection of genes or

their products noncancerous. The method is also useful for diagnosing,

prognosing, monitoring and classifying a disease condition e.g. cancer

such as neuroblastoma, rhabdomyosarcoma, Burkitt's or Ewing family of

tumours. The present sequence represents an anchored oligonucleotide

CC primer used to extract RNA from cells.

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02;

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

2708 TAAAAAAAAAAAAAAAAAAAAA 2728

:|||||

21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 400

ADL97794/C

ID ADL97794 standard; DNA; 22 BP.

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PT Producing molecular array by immobilizing to solid phase several known
PT molecules at low density for allowing individual immobilized molecules to
XX be individually resolved and spatially addressable.

PS Disclosure; Page 152; 219pp; English.

XX The invention relates to a method of producing (M1) a molecular array,
CC involves: immobilizing to a solid phase a several molecules at a density
CC which allows individual immobilized molecules to be individually
CC resolved, where each molecule in the array is spatially addressable and
CC the identity of each molecule is known or determined prior to
CC immobilization; and optionally providing a molecular array comprising a
CC several molecules immobilized to a solid phase at a density such that
CC individual immobilized molecules are not capable of being individual
CC resolved, and reducing the density of functional immobilized molecules in
CC the array such that remaining individual functional immobilized molecules
CC are capable of being individually resolved, where each individual
CC functional molecule in the resulting array is spatially addressable and
CC the identity of each molecule is known or determined prior to the density
CC reduction step. The array efficiently resolve complex samples, separate
CC correct signals from erroneous signals, eliminates need for sample
CC amplification, detects transient interactions or temporal characteristic
CC of single molecule processes. This sequence represents an oligonucleotide
CC used in the method of the invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02; Mismatches 0; Gaps 0;
Matches 20; Conservative 1; Indels 0;

QY 2708 TAAAAA AAAAAAAAAAAAAA 2728
:|||||
Db 21 BAAAAA AAAAAAAAAAAAAA 1

RESULT 401
ADS13095/c

ID ADS13095 standard; DNA; 22 BP.

XX ADS13095;

XX 02-DEC-2004 (first entry)

XX Oligo dT PCR primer used in the cloning of PON1 genes Seq 11.

XX PCR; primer; ss; paraoxonase; PON1; praaxon; nerve agent; sarin; soman;
XX in vitro evolution; hyperlipidaemia; atherosclerosis;
XX neurological disease; Alzheimer's disease; neurofibromatosis;
XX Huntington's disease; depression; amyotrophic lateral sclerosis;
XX multiple sclerosis; stroke; Parkinson's disease; multi-infarct dementia;
XX cancer; organophosphate poisoning; antileptemic; antiarteriosclerotic;
XX neuroprotective; nootropic; cytostatic; anticonvulsant; antidepressant;
XX antiparkinsonian; antidote.

XX Synthetic.

XX WO2004078991-A2.

XX 16-SEP-2004.

XX 04-MAR-2004; 2004WO-IL000216.

XX 04-MAR-2003; 2003US-0451267P.

XX 22-OCT-2003; 2003US-0512925P.

XX (YEDA) YEDA RES & DEV CO LTD.

XX Tawfik DS, Aharoni A, Gaydukov L, Sussman JL, Silman I;

XX WPI; 2004-668627/65.

XX Novel mutant of PON enzyme exhibiting increased substrate specificity to

PT PON substrate, useful for treating or preventing PON1-related diseases
PT e.g., hyperlipidemia, atherosclerosis, neurological disease or cancer.

XX Example 1; SEQ ID NO 11; 240pp; English.

XX This invention relates to novel mutant serum paraoxonase (PON1) nucleic
CC acid molecules and the encoded proteins thereof. Specifically, it refers
CC to enzymes that are calcium dependent phosphotriesterases essential to
CC the detoxification process of organophosphates such as the insecticide
CC praaxon and the nerve agents sarin and soman. The present invention
CC describes a method to identify mutated PONS that exhibit substantially
CC identical (or improved) substrate specificity in comparison with the wild
CC type PON and also those mutants that do not form aggregates when
CC expressed in bacteria. In particular, the method employed an in vitro
CC evolution process to identify proteins with desired traits such as
CC structural plasticity, catalytic activity and maintaining substrate
CC binding. These mutants have been found to be useful for treating or
CC preventing PON1-related diseases including hyperlipidaemia,
CC atherosclerosis, neurological disease (e.g. Alzheimer's disease,
CC neurofibromatosis, Huntington's disease, depression, amyotrophic lateral
CC sclerosis, multiple sclerosis, stroke, Parkinson's disease or multi-
CC infarct dementia), cancer and organophosphate poisoning. Accordingly,
CC they exhibit antileptemic, antiarteriosclerotic, neuroprotective,
CC nootropic, cytostatic, anticonvulsant, antidepressant and
CC antiparkinsonian activities, as well as being an antidote in a case of
CC poisoning. This oligonucleotide sequence is a PCR primer used for the
CC cloning and expression of a wild type PON1 gene of the invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02; Mismatches 0; Gaps 0;
Matches 20; Conservative 1; Indels 0;

QY 2708 TAAAAA AAAAAAAAAAAAAA 2728
:|||||
Db 21 BAAAAA AAAAAAAAAAAAAA 1

RESULT 402
ADY30380/c

ID ADY30380 standard; DNA; 22 BP.

XX ADY30380;

XX 05-MAY-2005 (first entry)

XX PCR primer to amplify the 5' CDS of rice xa31 cDNA by RACE PCR Seq 23b.
XX plant; disease resistance; crop improvement; transfection;
XX transgenic plant; bacterial blight disease; primer; ss; PCR; RACE.

XX Oryza sativa.

XX WO2005017158-A1.

XX 24-FEB-2005.

XX 13-AUG-2003; 2003WO-SG0000191.

XX 13-AUG-2003; 2003WO-SG0000191.

XX (TEMA-) TEMASEK LIFE SCI LAB.

XX Yin ZC, Wang G, Tian DS, Gu KY;

XX WPI; 2005-182374/19.

XX New isolated nucleic acid sequence that provides resistance to plants,
XX useful for making transgenic plants that are resistant to bacterial
XX blight disease caused by Xanthomonas.

XX Example 7; Page 35; 93pp; English.

XX This invention relates to a novel nucleic acid molecule that provides a
 CC plant with resistance to Xanthomonas when transfected into that plant.
 CC Specifically, it refers to a method of generating a plant that is
 CC resistant to Xanthomonas by transfecting the resistance gene Xa31 into
 CC the plant or transfecting Xa31 into a plant cell (or cells) and growing a
 CC plant thereof. The present invention describes an appropriate vector
 CC comprising a plant promoter operably linked to the nucleic acid, which
 CC can be used to produce the transgenic plant, preferably transgenic rice.
 CC As such, Xa31 acid is useful for generating transgenic plants that are
 CC resistant to bacterial blight disease caused by the bacterium
 CC Xanthomonas. This oligonucleotide sequence is a PCR primer given in an
 CC exemplification of the invention. NOTE: This sequence taken from example
 CC 7 differs from that given in the sequence listing of the specification.

XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;
 Best Local Similarity 95.2%; Pred. No. 7e+02;
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2728
 :|||||
 Db 21 BAAAAAATAAAAAAAAAAAAAA 1

RESULT 403
 ABK13916/c
 ID ABK13916 standard; DNA; 23 BP.
 AC ABK13916;
 XX
 DT 21-MAY-2002 (first entry)
 XX
 DE 3'-PCR primer used in method of identifying transcribed genes.
 XX
 KW Identification of transcribed gene; mRNA profile; gene expression;
 KW cellular process; fingerprinting; susceptibility to external factor;
 KW development; disease; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO200208461-A2.
 XX
 XX 31-JAN-2002.
 XX
 XX 23-JUL-2001; 2001WO-IB001539.
 XX
 XX 21-JUL-2000; 2000GB-00018016.
 XX
 XX 21-JUL-2000; 2000US-0219925P.
 XX
 XX (GLOB-) GLOBAL GENOMICS AB.
 XX
 XX Linnarsson S, Ernfors P, Bauren G;
 XX
 XX WPI; 2002-217065/27.
 XX
 XX Providing mRNA profile, by generating two independent patterns
 XX characteristic of sample mRNA population, analyzing patterns, comparing
 XX gene expression by cell types under varied conditions, and identifying
 XX genes.

XX Example 2; Page 45; 67pp; English.

XX The present invention relates to a method for providing a profile of mRNA
 CC molecules present in a sample. The method comprises generating two
 CC independent patterns characteristic of the population of mRNA molecules
 CC expressed in the sample and analysing the patterns using a combinatorial
 CC algorithm, comparing gene expression by different or same cell types
 CC under different conditions, and identifying genes having a role in
 CC various cellular processes. The method is useful for the analysis and
 CC identification of transcribed genes, and fingerprinting. The method can
 CC be used to identify genes which play a role in determining various

CC cellular processes, including susceptibility to external factors,
 CC development, and disease. The present sequence for a PCR primer is used
 CC in the methods of the present invention

XX SQ Sequence 23 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 3 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 23;
 Best Local Similarity 95.2%; Pred. No. 7.1e+02;
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2728
 :|||||
 Db 21 BAAAAAATAAAAAAAAAAAAAA 1

RESULT 404
 AAC96256/c
 ID AAC96256 standard; DNA; 25 BP.
 XX
 AC AAC96256;
 XX
 DT 26-FEB-2001 (first entry)
 XX
 DE HLA DPA1 gene PCR primer #13.
 XX
 KW DNA sequence analysis; sequencing; protein sequence; protein structure;
 KW gene typing; organ donation; bacteria identification; 16S rRNA; HLA;
 KW human leukocyte antigen; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200065088-A2.
 XX
 XX 02-NOV-2000.
 XX
 XX 20-APR-2000; 2000WO-EP003636.
 XX
 XX 26-APR-1999; 99EP-00303215.
 XX
 XX (AMSH) AMERSHAM PHARMACIA BIOTECH AB.
 XX
 XX Ulfendahl P, Wong K;
 XX
 XX WPI; 2000-679677/66.
 XX
 XX Identifying extendible primers for use in identification, or
 XX classification of a nucleic acid of an organism, allele or gene such as
 XX class 1/2 HLA comprises identifying all possible nucleotide sequences of
 XX specific length.

XX Claim 14; Page 48; 66pp; English.

XX The present invention provides a method for identifying a set of
 CC extendible primers which can be used in the identification, typing and
 CC classification of genes. This can then be used to predict protein
 CC sequence and structure, in organ donation to match the organ with the
 CC receiver, and to identify bacteria in a sample. The method can be used to
 CC type the human leukocyte antigen genes (HLA) and 16S rRNA genes in
 CC particular

XX SQ Sequence 25 BP; 3 A; 2 C; 3 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 25;
 Best Local Similarity 88.0%; Pred. No. 7.4e+02;
 Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2700 GTTGTACTAAAAAATAAAAAAAAAA 2724
 |||||
 Db 25 GTCTGTACAAACAAAAAATAAAAAA 1

RESULT 405
 ABA03917/c


```

PA (UVHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
XX WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
XX Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and
XX determining the length of the resulting amplicon(s). Also described are:
XX a method of determining (M2) microsatellite markers (MM) for
XX predisposition to a disease, associated with a gene that includes one or
XX more PML; and prediagnosis (M3) of diseases associated with gene that
XX include PML. The method is used to identify microsatellite markers, in a
XX disease-related gene, that are associated with a predisposition to
XX diseases and for prediagnosis of such diseases, especially prion diseases
XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX metabolic diseases; also to type genes that encode milk proteins,
XX hormones or transcription factors. The method is simpler, quicker and
XX particularly less expensive than known methods based on sequencing. This
XX sequence represents a primer used to genotype a region of the cow prion
XX protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX Sequence 25 BP; 0 A; 3 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 7.4e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 408
AAQ25565/C
ID AAQ25565 standard; DNA; 20 BP.
XX
AC AAQ25565;
XX
XX 25-MAR-2003 (revised)
DT 02-DEC-1992 (first entry)
XX
XX Dye-coupled 3'-amino modified oligonucleotide.
XX
XX DNA synthesis; RNA; antisense strands; detection; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 20
FT /*tag= a
FT /note= "3-amino modified"
XX
XX EF490281-A1.
XX
XX 17-JUN-1992.
XX
XX 06-DEC-1991; 91EP-00120935.
XX
XX 11-DEC-1990; 90DE-04039488.
XX
XX (FARH ) HOECHST AG.
XX
XX Engels J, Herrlein M, Konrad R, Mag M;
XX

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DR WPI; 1992-201578/25.
XX
XX New dye-coupled modified nucleosides, nucleotides and oligo:nucleotides -
XX useful for synthesis of antisense DNA and RNA strands in presence of
XX template, also for in-vivo and in-vitro detection of genetic material.
XX
XX Example; Page 9; 17pp; German.
XX
XX The sequence is an example of a dye coupled 3'-amino modified oligo-
XX nucleotide, it can be used in the synthesis of DNA and RNA nucleosides,
XX nucleotides and oligonucleotides and for the synthesis of opposite
XX strands in the presence of a template strand and in fluorescence
XX microscopic and macroscopic detection in vivo and in vitro of genetic
XX material. It is labelled with a fluorescent dye. See also AAQ25566 and
XX AAQ25567. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 409
AAQ33554/C
ID AAQ33554 standard; DNA; 20 BP.
XX
AC AAQ33554;
XX
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Microsatellite sequence from clone AGLA247.
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
XX
XX WO9213102-A1.
XX
XX 06-AUG-1992.
XX
XX 15-JAN-1992; 92WO-US000340.
XX
XX 15-JAN-1991; 91US-00642342.
XX
XX (GENM-) GENMARK.
XX
XX Georges M, Massey JM;
XX
XX WPI; 1992-284684/34.
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
XX mapping, and selective breeding.
XX
XX Table 7; Page 150; 517pp; English.
XX
XX The sequence is that of a bovine microsatellite sequence obtd. by
XX screening a library of bovine MboI DNA fragments of between 250 and 500
XX bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
XX clones cross-hybridised. Assuming independent distribution of
XX microsatellites and MboI sites, the frequency of (76)n >9 microsatellites
XX in the bovine genome is estimated at >100,000. The sequence information
XX for ca. 230 such bovine microsatellites is summarised in the
XX specification and indexed herein (see below). The sequences upstream and
XX downstream of the microsatellite sequence were used to generate the
XX required PCR primers for in vitro amplification of the corresp.
XX microsatellite (using the program OPTIPRIM). The microsatellites may be

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CC used to identify individuals, for parentage testing, and in the genetic
 CC mapping of economic trait loci, or genes involved the determinism of
 CC economically important traits esp. in cattle, to allow selective
 CC breeding. See also AAQ39501-34437. (Updated on 25-MAR-2003 to correct PN
 CC field.)

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 410

AAQ58578
 ID AAQ58578 standard; RNA; 20 BP.

XX
 AC AAQ58578;

XX 25-MAR-2003 (revised)

DT 21-AUG-1994 (first entry)

XX Sequence of synthetic RNA oligo which is a target nucleotide for a novel
 DE receptor.

XX Novel receptor; nucleic acid; transport; oligo; ss.

XX Synthetic.

XX WO9404194-A1.

PN 03-MAR-1994.

PD 13-AUG-1993; 93WO-US007603.

XX 14-AUG-1992; 92US-00930087.

XX (MASI) MASSACHUSETTS INST TECHNOLOGY.

XX Usman N, Rebek J, De Mendoza J;

XX WPI; 1994-082846/10.

XX Transport of nucleic acid derivs. across membranes - using new receptors
 PT which use salt bridging, aromatic stacking, hydrogen bonding and
 PT chelation.

XX Example; Table 1, page 38; 103pp; English.

XX The inventors claim a method of transporting a nucleic acid deriv. across
 CC a membrane which comprises using a receptor that uses salt bridgin,
 CC aromatic stacking, H bonding and chelation to recognise the nucleic acid
 CC deriv. AAQ56305, AAQ58577-86 are nucleic acid derivs used in the
 CC examples. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAA 20

RESULT 411

AAQ94205/C

ID AAQ94205 standard; DNA; 20 BP.

XX
 AC AAQ94205;

XX 25-MAR-2003 (revised)

DT 24-AUG-1995 (first entry)

XX Alpha-anomeric oligonucleotide ligand 1803 for oestradiol hapten.

XX Oligonucleotide ligand; steroid hormone; hapten; immobilisation;
 KW immunodetection; estradiol; alpha-anomer; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc_feature 1..21

FT /*tag= b

FT /note= "the glycosidic bonds between nucleotides are all
 FT in the alpha-anomer form"

FT modified_base 20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "carries a group derived ffrom aminopropanediol"

XX WO9429723-A1.

XX 22-DEC-1994.

XX 10-JUN-1994; 94WO-FR000689.

XX 11-JUN-1993; 93FR-00007093.

XX (CROS/) CROS P.

XX (KURF/) KURFURST R.

XX (BATT/) BATTAIL N.

XX (PIGA/) PIGA N.

XX Cros P, Kurfurst R, Battail N, Piga N;

XX WPI; 1995-036665/05.

XX Assay device for hapten or its specific antibodies - comprises support
 PT having competitive reagent immobilised via nucleic acid ligand to improve
 PT orientation and accessibility.

XX Example 1; Page 10; 39pp; French.

XX Oligonucleotides (AAQ94201-Q94205) were synthesised for use as ligands.
 CC The ligands are covalently linked to a hapten (esp. a steroid hormone) to
 CC form a conjugate which is then immobilised on a solid support for
 CC interaction with antibodies against the hapten. Nucleic acid ligands are
 CC less likely to be recognised by the antibodies than are peptide ligands
 CC and nucleic acids are also less likely to undergo intramolecular
 CC organisation which interferes with accessibility of the hapten to the
 CC antibodies. For immunodiagnosis of oestradiol, the active hapten
 CC oestradiol-6-carboxymethoxime-N- hydroxy succinimide ester was used.
 CC (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 412

AAQ75577/c

ID AAQ75577 standard; DNA; 20 BP.

XX
 AC AAQ75577;


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XX 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2706 ACTAAAAAAAAAAAAAAAAA 2725
Db 20 ACTAAAAAAAAAAAAAAAAA 1

RESULT 413
AAQ90405/C
ID AAQ90405 standard; DNA; 20 BP.
XX AAQ90405;
XX 08-JAN-1996 (first entry)
XX T2 (synthetic DNA probe with 5' amino terminal #4).
XX T2; HLA; dQa; self-addressable electronic device; SAED; hybridisation;
KW ss.
XX Synthetic.
XX Key Location/Qualifiers
FH misc_feature 1
FT /*tag= a
FT /note= "3' aminolink2 Thymine; allows binding to any
FT amine"
XX WO9512808-A1.
XX 11-MAY-1995.
XX 26-OCT-1994; 94WO-US012270.

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XX 01-NOV-1993; 93US-00146504.
XX (NANO-) NANOGEN INC.
XX Heller MJ, Tu E;
XX WPI; 1995-185870/24.
XX New self-addressable electronic devices - used for multi-step and
PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics
PT and bio:polymer synthesis.
XX Example 1; Page 41; 86pp; English.
XX The sequences represented by, AAQ90402-15 are synthetic DNA probes
CC containing 5' amino termini. The sequences shown in AAQ90390-401 are
CC synthetic DNA probes with 3' ribonucleoside termini. These sequences were
CC specific for the polymorphisms of HLA gene dQa. The sequences were used
CC in the device of the invention. This is a self-addressable electronic
CC device (SAED) that can be used to carry out multi-step and multiplex
CC reactions, such as nucleic acid hybridisations. The advantages of this
CC method are that these reactions can be carried out with complete and
CC precise electronic control, and that the rate, specificity and
CC sensitivity of these reactions are greatly improved at micro-locations
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 414
AAT04916/C
ID AAT04916 standard; cDNA; 20 BP.
XX AAT04916;
XX 25-MAR-2003 (revised)
DT 15-MAY-1996 (first entry)
XX Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-7.
XX Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;
KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;
KW transplant; neoplasia; myelosuppression; bone marrow; ss.
XX Synthetic.
XX BP676470-A1.
XX 11-OCT-1995.
XX 04-OCT-1990; 95EP-00105391.
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 28-SEP-1990; 90WO-US005548.
XX 01-OCT-1990; 90US-00589701.
XX (AMGE-) AMGEN INC.
XX Zsebo KM, Suggs SV, Bosselman RA, Martin FH;
XX WPI; 1995-346090/45.
XX New stem cell factor polypeptide(s) - for stimulating the growth of

```

PT primitive progenitor cells, esp. for treating disorders involving blood
 PT cells.

PS Example 3; Fig 12C; 127pp; English.

XX
 CC AAT04915-T04922 are oligonucleotide primers and probes used for the
 CC amplification and sequencing of mammalian stem cell factor (SCF). Non-
 CC antrally occurring SCF and C-terminally truncated polypeptides, having
 CC amino acid sequences sufficiently duplicative of naturally occurring SCF,
 CC stimulate growth of primitive progenitors such as haematopoietic
 CC progenitor cells, neural stem cells and primordial germ stem cells. The
 CC peptides can be used in a composition for treating leucopenia, anaemia or
 CC thrombocytopenia, for enhancing engraftment of bone marrow during
 CC transplantation or for bone marrow recovery after chemotherapy or
 CC radiation-induced bone marrow aplasia or myelosuppression. They can also
 CC be used for treating neoplasia, nerve damage, infertility, intestinal
 CC damage or myeloproliferative disorders. Antibodies may be raised against
 CC the peptides for use in detection or neutralisation of SCF in serum. SCF
 CC may be useful for the treatment of AIDS and severe combined
 CC immunodeficiency (SCID) states alone or in combination with other factors
 CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
 DB 20 CTAAGAAAAA 1

RESULT 415

AAV07752/c
 ID AAV07752 standard; DNA; 20 BP.

XX AAV07752;

DT 07-DEC-1998 (first entry)

XX Phosphorothioate oligonucleotide.

XX phosphorothioate; sulphurisation; heterocycle; automated synthesis;
 KW antisense; EDITH; Beaucage reagent; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FT misc_feature 1..20
 FT /*tag= a
 FT /note= "phosphorothioate internucleotide linkages"

XX WO9741130-A2.

XX 06-NOV-1997.

XX 29-APR-1997; 97WO-US007118.

XX 30-APR-1996; 96US-00641920.

XX (MINU) UNIV MINNESOTA.

XX (LOUU) UNIV LOUISIANA STATE & AGRIC.

XX Barany G, Musier-Forsyth K, Xu Q, Chen L, Hammer RP;

XX WPI; 1997-549671/50.

XX Sulphurisation of phosphorus-containing compounds, e.g.

PT oligonucleotide(s) - by contacting the compound with a di-sulphide-
 PT containing five-membered heterocycle.

XX Example 7; Page 30; 51pp; English.

XX
 CC The present invention provides a method for sulphurising phosphorus-
 CC containing compounds. It comprises contacting the phosphorus-containing
 CC compound with a 1,2,4-dithiazolidine-2,5-dione compound or a 3-
 CC substituted-1,2,4-dithiazolin-5-one compound. The method is especially
 CC useful for incorporation of phosphorothioate linkages into biologically
 CC important molecules such as DNA, RNA and phosphopeptides. Molecules
 CC containing such linkages are useful e.g. as antisense compounds for
 CC inhibiting gene expression, as reagents for studying DNA-protein or RNA-
 CC protein interactions, or as catalytic RNA. The present sequence
 CC represents an oligonucleotide with phosphorothioate linkages prepared by
 CC the method of the invention

XX Sequence 20 BP; 1 A; 0 C; 0 G; 0 T; 19 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAGAAAAA 2727
 DB 20 TAAAGAAAAA 1

RESULT 416

AAAT63649/c

ID AAT63649 standard; DNA; 20 BP.

XX AAT63649;

DT 06-JUN-1997 (first entry)

DE Anti-HTLV antisense reference oligonucleotide HT.

XX antisense; complementary; tax gene; inhibit; HTLV-1;

KW human T-cell lymphotropic virus type 1; viral antigen expression; ss.

XX Synthetic.

XX JP09052898-A.

XX 25-FEB-1997.

XX 09-AUG-1995; 95JP-00224606.

XX 09-AUG-1995; 95JP-00224606.

XX (SOYA-) SOYAKU GIJUTSU KENKYUSHO KK.

XX WPI; 1997-197252/18.

XX Anti-HTLV-1 anti-sense oligo:nucleotide - is complementary to region of
 FT tax gene from human T-cell lymphotropic virus type 1 and inhibits viral
 FT antigen expression.

XX Example 1; Page 8; 10pp; Japanese.

XX Oligonucleotides having a partial sequence consisting of at least 15
 CC bases of AAT63641 (an antisense oligo complementary to a region of the
 CC tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTLV-
 CC 1) viral antigen expression) are claimed. In an example, six antisense
 CC oligos were designed, T1-T6 (AAT63650-55) and were compared to six oligos
 CC derived from other regions of HTLV-1, i.e. S1 (splice junction), P1
 CC (p21), R1 (rex), RRI (rex response element), E1 (env) and G1 (gag), four
 CC reference oligonucleotides TIS (tax-sense), HC (dc20), HT (dr20)
 CC (AAT63647-49) and a random 20mer (RAN) in a HTLV-1 virus antigen
 CC expression inhibiting test. Oligonucleotide T1 gave the best results

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 417
AAV34591
ID AAV34591 standard; DNA; 20 BP.
XX
AC AAV34591;
XX
DT 25-AUG-1998 (first entry)
XX
DE M. vaccae antigenic sequence hybridising oligo AD12.
XX
KW Mycobacterium vaccae; antigen; therapy; prevention; cytokine production;
KW M. avium; M. tuberculosis; immune response enhancer; cell proliferation;
KW mycobacteria infection; vaccine; cancer; ss.
XX
OS Synthetic.
OS Mycobacterium vaccae.
XX
PN W09808542-A2.
XX
PD 05-MAR-1998.
XX
PF 28-AUG-1997; 97WO-NZ000105.
XX
PR 29-AUG-1996; 96US-00705347.
PR 12-JUN-1997; 97US-00873970.
XX
PA (GENE-) GENESIS RES & DEV CORP.
XX
PI Tan P, Hiyama J, Visser E, Skinner MA, Scott LM, Prestidge RL;
XX WPI; 1998-216926/19.
XX
PT Mycobacterium vaccae polypeptides - used to develop products for use in
PT detection, therapy and prevention of mycobacteria infections or as immune
PT response enhancers.
XX
PS Example 8; Page 99; 153pp; English.
XX
CC This oligonucleotide is used in the DNA cloning strategies of the
CC Mycobacterium vaccae antigens. The invention provides M. vaccae
CC polypeptides that comprise an immunogenic portion of a soluble M. vaccae
CC antigen, or a variant, where the antigen induces an immune response in
CC patients previously exposed to a mycobacterium. Such M. vaccae
CC polypeptides can be used in methods for enhancing non-specific immune
CC response. The methods and products can be used for the detection,
CC treatment and prevention of infectious diseases caused by mycobacteria
CC such as M. vaccae, M. avium or M. tuberculosis. The products also have
CC the ability to induce cell proliferation and cytokine production (e.g.
CC interferon-gamma and interleukin-12 production) in T cells, NK cells, B
CC cells, or macrophages. They can be used for enhancing immune responses
CC for use in vaccines or immunotherapy of infectious diseases and cancers
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 418
AAT86606/c
ID AAT86606 standard; DNA; 20 BP.
XX

```

```

AC AAT86606;
XX
DT 04-JUN-1998 (first entry)
XX
DE Oligonucleotide separated by capillary affinity gel electrophoresis.
XX
KW Capillary affinity gel electrophoresis; separation; polymer-gel;
KW polyacrylamide; ss.
XX
OS Synthetic.
XX
PN W09745721-A1.
XX
PD 04-DEC-1997.
XX
PF 23-MAY-1997; 97WO-EP002647.
XX
PR 24-MAY-1996; 96CH-00001320.
XX
PA (NOVS ) NOVARTIS AG.
XX
PI Muscate A, Paulus A, Natt F;
XX WPI; 1998-041763/04.
XX
PT Separation of electrically charged target molecules - by capillary
PT affinity gel electrophoresis using polymer-gel to which receptors for
PT target molecules are bound.
XX
PS Example D3; Page 25; 41pp; English.
XX
CC A mixture of oligonucleotides (AAT86604-7) were separated by a new
CC process using capillary affinity gel electrophoresis. The invention
CC relates to selective separation of electrically charged target molecules
CC in an analytical mixture. It comprises capillary affinity gel
CC electrophoresis using a capillary tube which is at least partly filled
CC with a polymer gel. Receptors for target molecules are covalently bound
CC to the polymer. An electric field of at least 50 volts/cm is applied. The
CC capillary tube is charged with the analytical mixture. In a first
CC separation stage, the target molecules in the mixture are bound to the
CC receptors and the remaining components are eluted, optionally whilst
CC splitting open. In a second stage, the elution conditions are changed,
CC optionally in stages, so that the affinity of the target molecules for
CC the receptor is eliminated and the target molecules are eluted and
CC detected, optionally whilst splitting open. The process is useful for
CC selective separation and/or determination of charged organic compounds,
CC such as oligonucleotides, peptides or carbohydrates. It may be used, e.g.
CC for isolation of specific proteins and DNA molecules, purification of
CC antibodies, analysis of antisense compounds or screening for enzyme
CC inhibitors. The process achieves higher resolution and selectivity than
CC prior art processes, especially in the case of complex biological
CC analytical mixtures. It has high sensitivity, even with small amounts of
CC samples. The derivatised polymers may be synthesised specifically using
CC standard methods
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 419
AAX27533/c
ID AAX27533 standard; RNA; 20 BP.
XX
AC AAX27533;
XX
DT 27-MAY-1999 (first entry)

```

XX Synthetic RNA sequence produced by the method of the invention.
 DE
 XX Silyloxymethyl; phosphonate; silyloxymethyl halide; diagnosis; ss;
 KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.
 XX
 OS Synthetic.
 XX
 PN WO9909044-A1.
 XX
 PD 25-FEB-1999.
 XX
 XX 17-AUG-1998; 98WO-BP005215.
 XX
 XX 18-AUG-1997; 97CH-00001931.
 XX
 XX (PITS/) PITTSCH S.
 PA (WEIS/) WEISS P A.
 PA (JENN/) JENNY L.
 XX
 XX Pitsch S, Weiss PA, Jenny L;
 PI
 XX WPI; 1999-180963/15.
 XX
 XX 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have
 PT high purity, use in machine synthesis of ribonucleic acids, enable longer
 PT oligonucleotide chain construction, and larger amounts.
 XX
 XX Example 6; Page 25; 38pp; English.
 PS
 XX The invention relates to silyloxymethyl protected D- or L-ribonucleosides
 CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are
 CC intermediates for synthesis of RNA-oligonucleotides with predetermined
 CC nucleotide sequence, particularly by machine synthesis. The groups
 CC specified above, apart from those on silyl, are those particularly for
 CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide
 CC products in diagnosis, therapy, and as research tools, are well known,
 CC and are not dealt with in detail. (II) is an intermediate for (I). The
 CC silyloxymethyl halide reagent is easy to prepare, and yields are high.
 CC Introduction of the silyloxymethyl group into the ribonucleoside is
 CC simple and rapid, and the acetal bond formed does not migrate.
 CC eliminating particularly the prior art problem of 2' to 3' isomerisation.
 CC The methylenedioxy group spacer between the silyl group and nucleoside
 CC ring results in less steric hindrance than bulky direct silyloxy
 CC linkages, enabling first, a range of choices for the silyl substituents,
 CC to provide, e.g., acid or base stability; and second, higher yields in
 CC coupling. Purer products are therefore obtained than in prior art,
 CC enabling larger quantities and longer chains of oligoribonucleotides to
 CC be synthesised successfully, and in shorter times
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 20 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 420
 AAZ11326
 ID AAZ11326 standard; DNA; 20 BP.
 XX
 XX AAZ11326;
 AC
 XX 25-OCT-1999 (first entry)
 DT
 XX Mycobacterial 16S rRNA specific oligo AD12.
 DE
 XX Mycobacterium vaccae protein; antigen; T cell activation; cytokine;
 KW dendritic cell maturation; infectious disease; immune disorder; cancer;
 XX

KW respiratory system; mycobacterial infection; allergy; tuberculosis;
 KW leprosy; sarcoidosis; lung cancer; asthma; skin disorder; psoriasis;
 KW dermatitis; eczema; alopecia areata; skin cancer; basal carcinoma;
 KW squamous cell carcinoma; melanoma; PCR primer; ss.
 XX
 OS Synthetic.
 OS Mycobacterium vaccae.
 XX
 PN WO9932634-A2.
 XX
 PD 01-JUL-1999.
 XX
 XX 23-DEC-1998; 98WO-NZ000189.
 XX
 XX 23-DEC-1997; 97US-00996624.
 PR 23-DEC-1997; 97US-00997080.
 PR 23-DEC-1997; 97US-00997362.
 PR 11-JUN-1998; 98US-00095855.
 PR 17-SEP-1998; 98US-00156181.
 PR 04-DEC-1998; 98US-00205426.
 XX
 XX (GENE-) GENESIS RES & DEV CORP LTD.
 PA
 XX Tan P, Watson J, Visser ES, Skinner MA, Prestidge RL;
 PI
 XX WPI; 1999-430163/36.
 DR
 XX Enhancing immune response to an antigen.
 PT
 XX Example 15; Page 177; 243pp; English.
 PS
 XX The invention provides heat-killed Mycobacterium vaccae, or recombinant
 CC M. vaccae proteins. The M. vaccae proteins may be employed to activate T
 CC cells and natural killer cells, to stimulate the production of cytokines,
 CC to enhance the expression of co-stimulatory molecules on dendritic cells
 CC and monocytes, and to enhance dendritic cell maturation and function. The
 CC proteins can be expressed by standard recombinant methodology.
 CC Pharmaceutical compositions comprising the proteins or nucleic acid
 CC sequences encoding the proteins can be used for the treatment
 CC prevention, and detection of disorders including infectious diseases,
 CC immune disorders and cancer. In particular, the compounds and methods are
 CC used for treatment of diseases of the respiratory system, such as
 CC mycobacterial infections, asthma, allergies, tuberculosis, leprosy,
 CC sarcoidosis and lung cancers, and disorders of the skin such as
 CC psoriasis, atopic dermatitis, eczema, allergic contact dermatitis,
 CC alopecia areata, and skin cancers such as basal carcinoma, squamous cell
 CC carcinoma and melanoma
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 421
 AAA40449
 ID AAA40449 standard; DNA; 20 BP.
 XX
 XX AAA40449;
 AC
 XX 13-NOV-2000 (first entry)
 DT
 XX Electrochemical detection method sample DNA target.
 DE
 XX Electrochemical detection; glucose; cholesterol; urea nitrogen;
 KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
 KW plasma; serum; urine; lymph diagnosis; ss.
 XX

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OS Synthetic.
XX EP1018646-A2.
XX
XX
XX 12-JUL-2000.
XX
XX 07-JAN-2000; 2000EP-00100126.
XX
XX 06-JAN-1999; 99JP-00001111.
XX 24-MAY-1999; 99JP-00143599.
XX
XX (FUJF ) FUJI PHOTO FILM CO LTD.
XX
XX Ogawa M, Takenaka S, Takagi M;
XX WPI; 2000-444372/39.
XX
XX Quantitative analysis of a biochemical compound such as glucose, in body
XX a body fluid such as blood, comprising detecting enhanced electron
XX transfer between an oxidase and a DNA-immobilized electrode, useful for
XX diagnosis of disease.
XX
XX Example 1; Page 8; 14pp; English.
XX
XX This invention describes a novel method for quantitatively analysing a
XX biochemical compound (i) which comprises contacting (i) with double
XX stranded DNA fixed to the surface of an electrode at their terminals in
XX which electrochemically active threading intercalators are intercalated,
XX in an aqueous medium under application of electric potential to the
XX electrode in the presence of an oxidase which oxidizes the biochemical
XX compound and becomes reduced, and detecting electric current flowing
XX between the electrode and a second electrode in the aqueous medium. The
XX method is useful for detection of biochemical compounds such as glucose,
XX cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic
XX acid in body fluids such as whole blood, plasma, serum, urine, and lymph
XX for diagnosis of various diseases. The method allows detection of
XX biochemical compounds quickly and easily with a high sensitivity using a
XX simple apparatus. This sequence represents DNA fragment used as a target
XX probe DNA in the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 422
AAA40448/C
ID AAA40448 standard; DNA; 20 BP.
XX
XX AAA40448;
XX
XX 13-NOV-2000 (first entry)
XX
XX Electrochemical detection method fixed probe DNA.
XX
XX Electrochemical detection; glucose; cholesterol; urea nitrogen;
XX bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
XX plasma; serum; urine; lymph diagnosis; probe; ss.
XX
XX Synthetic.
XX
XX EP1018646-A2.
XX
XX 12-JUL-2000.
XX
XX 07-JAN-2000; 2000EP-00100126.
XX
XX

```

```

PR 06-JAN-1999; 99JP-00001111.
PR 24-MAY-1999; 99JP-00143599.
PA (FUJF ) FUJI PHOTO FILM CO LTD.
XX
PI Ogawa M, Takenaka S, Takagi M;
XX WPI; 2000-444372/39.
XX
XX Quantitative analysis of a biochemical compound such as glucose, in body
XX a body fluid such as blood, comprising detecting enhanced electron
XX transfer between an oxidase and a DNA-immobilized electrode, useful for
XX diagnosis of disease.
XX
XX Example 1; Page 7; 14pp; English.
XX
XX This invention describes a novel method for quantitatively analysing a
XX biochemical compound (i) which comprises contacting (i) with double
XX stranded DNA fixed to the surface of an electrode at their terminals in
XX which electrochemically active threading intercalators are intercalated,
XX in an aqueous medium under application of electric potential to the
XX electrode in the presence of an oxidase which oxidizes the biochemical
XX compound and becomes reduced, and detecting electric current flowing
XX between the electrode and a second electrode in the aqueous medium. The
XX method is useful for detection of biochemical compounds such as glucose,
XX cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic
XX acid in body fluids such as whole blood, plasma, serum, urine, and lymph
XX for diagnosis of various diseases. The method allows detection of
XX biochemical compounds quickly and easily with a high sensitivity using a
XX simple apparatus. This sequence represents DNA fragment used as fixed
XX probe DNA in the method of the invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 423
AAA13753/C
ID AAA13753 standard; DNA; 20 BP.
XX
XX AAA13753;
XX
XX 27-JUL-2000 (first entry)
XX
XX Stem cell factor universal oligonucleotide 220-7.
XX
XX Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;
XX primitive progenitor cell; haematopoietic disorder; syngeneic;
XX allogeneic; autologous bone marrow transplant; gene therapy;
XX transfection; haematopoietic stem cell; acute blood loss; neoplasia;
XX cancer; ss.
XX
XX Synthetic.
XX
XX EP992579-A1.
XX
XX 12-APR-2000.
XX
XX 04-OCT-1990; 99EP-00122861.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 28-SEP-1990; 90MO-US005548.
XX 01-OCT-1990; 90US-00589701.
XX 04-OCT-1990; 90EP-00310899.

```

PT Saturated and unsaturated derivatives of abietic acid and their
PT conjugated derivatives with natural and synthetic polymers, having use in
PT diagnostics, chemical reactions and analysis.
XX
XX Example 5; Page 20; 39pp; French.
XX
XX The invention relates to novel saturated and unsaturated abietane
XX derivatives. The new compounds may be used directly or indirectly in the
XX development of new diagnostic tests, to follow infections, especially
XX viral infections, to follow and/or measure chemical products, especially
XX potential pollutants. In diagnostic tests they may be used as markers, or
XX to form a universal solid phase after immobilization on a solid support,
XX to produce monoclonal antibodies or polyclonal antibodies having
XX diagnostic uses. The oligonucleotides AAZ91113-291117 represent examples
XX of sequences that can be labeled with the new abietane derivatives. The
XX new derivatives may be used to substitute for biotin in diagnostic tests,
XX but because they are not found naturally in humans the risk of potential
XX interactions with biological molecules is eliminated
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 425
AAZ91117/c
ID AAZ91117 standard; DNA; 20 BP.
XX
XX AAZ91117;
XX 07-NOV-2000 (first entry)
XX 2'-Methoxyethoxy-modified oligonucleotide.
XX Phosphodiester oligonucleotide; H-phosphonate chemistry; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..19
XX /*tag= a
XX /note= "2'-methoxyethoxy modified thymidine"
XX
XX WO200047593-A1.
XX
XX 17-AUG-2000.
XX
XX 11-FEB-2000; 2000WO-US003543.
XX
XX 12-FEB-1999; 99US-00250075.
XX (ISIS-) ISIS PHARM INC.
XX Manoharan M, Maier MA;
XX
XX WPI; 2000-558188/51.
XX
XX Preparation of mixed backbone oligomeric compounds useful as e.g. primers
XX for diagnostic tests, involves oxidation of H-phosphonate internucleoside
XX linkages to phosphodiester internucleoside linkages.
XX
XX Example 12; Page 34; 49pp; English.
XX
XX The present sequence is that of a phosphodiester oligonucleotide
XX containing 20 T nucleobases, 19 having a 2'-methoxyethoxy group on its 5',
XX ribosyl sugar moiety. It is an example of an oligomeric compound produced
XX according to the methods of the invention. The invention provides

XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Suggs SV, Bosselmann RA, Martin FH;
XX
XX WPI; 2000-259135/23.
XX
XX Production of hematopoietic cells suitable for administration to a
XX subject using progenitor cells and expanding the cells using stem cell
XX factor.
XX
XX Example 3; Fig 12C; 123pp; English.
XX
XX A method has been developed of making haematopoietic cells suitable for
XX administration to a subject. The method comprises: (a) obtaining
XX haematopoietic progenitor cells from a donor; and (b) expanding the cells
XX by adding to the cells a haematopoietically effective dose of a
XX polypeptide product having at least part of the primary structural
XX confirmation and one or more of the biological properties of naturally
XX occurring stem cell factor (SCF). The method is useful for stimulating
XX primitive progenitor cells including early haematopoietic progenitor
XX cells which are capable of maturing to erythroid, megakaryocyte,
XX granulocyte, lymphocyte and macrophage cells. SCF results in absolute
XX increases in haematopoietic cells of both myeloid and lymphoid lineages.
XX SCF is useful for treating haematopoietic disorders. The method is useful
XX for expanding early haematopoietic progenitors in syngeneic, allogeneic
XX or autologous bone marrow transplant. SCF is useful for enhancing the
XX efficiency of gene therapy based on transfecting haematopoietic stem
XX cells. SCF is also useful for combating the myelosuppressive effects of
XX anti-HIV drugs such as AZT and for enhancing haematopoietic recovery
XX after acute blood loss and as a boost to the immune system for fighting
XX neoplasia (cancer). The present sequence represents a universal
XX oligonucleotide which is used in an example from the present invention
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAAA 1
RESULT 424
AAZ91117/c
ID AAZ91117 standard; DNA; 20 BP.
XX
XX AAZ91117;
XX 06-JUN-2000 (first entry)
XX Oligonucleotide #5 for conjugation to abietane derivative.
XX Abietane derivative; labelling; diagnostic test; biotin substitute; ss.
XX Synthetic.
XX FR2781802-A1.
XX
XX 04-FEB-2000.
XX
XX 31-JUL-1998; 98FR-00010084.
XX 31-JUL-1998; 98FR-00010084.
XX (INMR) BIO MERIEUX.
XX
XX Charles MH, Piga N, Battail PN, Veron L, Delair T, Mandrand B;
XX
XX WPI; 2000-239603/21.
XX

compounds and methods for the preparation of mixed backbone oligomeric, or chimeric, compounds having phosphodiester internucleoside linkages in addition to phosphorothioate and/or phosphoramidate internucleoside linkages. The methods also include incorporation of boranophosphate internucleoside linkages. The methods utilise H-phosphonate intermediates that are coupled together forming contiguous regions of 1 or more H-phosphonate internucleoside linkages. Each contiguous region is subsequently oxidized to phosphodiester, phosphorothioate, phosphoramidate or boranophosphate internucleoside linkages prior to further elongation. Mixed backbone oligomeric compounds are prepared in this manner by oxidizing adjacent regions with different reagents. Oligomeric compounds of the invention are prepared using novel oxidation steps that oxidize a region of 1 or more H-phosphonate internucleoside linkages without degrading existing linkages that have been previously oxidized. The oligonucleotides obtained are useful as primers in PCR, probes, linkers, gene fragments and for other diagnostic tests on e.g. biological tissue, fluid, cells etc., as research reagents, and as antiviral agents

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 426
AAC87238/c
ID AAC87238 standard; DNA; 20 BP.
AC AAC87238;
XX
DT 09-MAR-2001 (first entry)
DE
XX
XX Phosphorothioate poly T oligonucleotide, SEQ ID NO:17.
KW Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
KW Immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
KW hnRNP A1; lupus La protein; functional modifier identification; agonist;
KW antagonist; mimic; inhibitor; drug screening;
KW cellular target identification; oligonucleotide optimisation;
KW immunotherapy; ss.
XX
XX Synthetic. ;
XX WO200067023-A1.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000WO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
XX 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Noll BO, Schetter C, Krieg AM;
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA functional modifiers, immunostimulatory DNA binding competitors and to optimize immunostimulatory oligodeoxynucleotides for stimulation.
XX
XX Example 1; Page 45; 95pp; English.
XX
XX The invention relates to the use of an immunostimulatory single-stranded DNA-binding protein in screening assays to identify compounds which bind

XX The invention relates to the use of an immunostimulatory single-stranded
CC DNA-binding protein in screening assays to identify compounds which bind
CC to it and thereby act as functional modifiers of immunostimulatory
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.
CC Immunostimulatory DNA-binding proteins can also be used in screening
CC methods to identify immunostimulatory DNA binding competitors, and to
CC optimize an immunostimulatory ODN for immune stimulation. Isolated
CC complexes of an immunostimulatory DNA-binding protein bound to an
CC immunostimulatory ODN can additionally be used to screen a panel of
CC candidate target molecules to identify the cellular target molecules of
CC the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
CC used in the methods of the invention are the RNA-binding proteins
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening
CC methods are useful for identifying a compound that inhibits interaction
CC between immunostimulatory DNA and an immunostimulatory DNA-binding
CC protein and for identifying agonists useful in immunotherapy. The complex
CC is useful in screening for immunostimulatory DNA cellular target
CC molecules. The candidate immunostimulatory ODN competitors allow the
CC investigation of structure/activity relationships of immunostimulatory
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence
CC represents an oligonucleotide used in an exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAA 1
RESULT 428
AAC87241/C
ID AAC87241 standard; DNA; 20 BP.
XX AAC87241;
XX
XX
XX 09-MAR-2001 (first entry)
XX
XX Poly T oligonucleotide, SEQ ID NO:20.
XX
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
XX immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
XX hnRNP A1; lupus La protein; functional modifier identification; agonist;
XX antagonist; mimic; inhibitor; drug screening;
XX cellular target identification; oligonucleotide optimisation;
XX immunotherapy; ss.
XX
XX Synthetic.
XX
XX WO200067023-A1.
XX
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000WO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
XX 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Noll BO, Schetter C, Krieg AM;
XX
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
XX functional modifiers, immunostimulatory DNA binding competitors and to
XX

optimize immunostimulatory oligodeoxynucleotides for stimulation.

Example 1; Page 45; 95pp; English.

The invention relates to the use of an immunostimulatory single-stranded
DNA-binding protein in screening assays to identify compounds which bind
to it and thereby act as functional modifiers of immunostimulatory
oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
consist of immunostimulatory DNA binding inhibitors, immunostimulatory
DNA mimics, and immunostimulatory DNA agonists and antagonists.
Immunostimulatory DNA-binding proteins can also be used in screening
methods to identify immunostimulatory DNA binding competitors, and to
optimize an immunostimulatory ODN for immune stimulation. Isolated
complexes of an immunostimulatory DNA-binding protein bound to an
immunostimulatory ODN can additionally be used to screen a panel of
candidate target molecules to identify the cellular target molecules of
the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
used in the methods of the invention are the RNA-binding proteins
nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening
methods are useful for identifying a compound that inhibits interaction
between immunostimulatory DNA and an immunostimulatory DNA-binding
protein and for identifying agonists useful in immunotherapy. The complex
is useful in screening for immunostimulatory DNA cellular target
molecules. The candidate immunostimulatory ODN competitors allow the
investigation of structure/activity relationships of immunostimulatory
DNA-binding proteins and immunostimulatory ODNs. The present sequence
represents an oligonucleotide used in an exemplification of the invention

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 429

AAS10402/C

ID AAS10402 standard; DNA; 20 BP.

XX AAS10402;

XX 24-OCT-2001 (first entry)

XX DNA template for 3' end labeling of an RNA molecule, #14.

XX 3' RNA end labeling; DNA template; Okazaki fragment; 5' overhang; ss.

XX Synthetic.

XX US6238865-B1.

XX 29-MAY-2001.

XX 16-OCT-1998; 98US-00173936.

XX 17-OCT-1997; 97US-0063757P.

XX (CHEN/) CHEN G.
XX (HUAN/) HUANG Z.
XX (SZOS/) SZOSTAK J W.

XX Huang Z, Szostak JW;

XX WPI; 2001-366470/38.

XX Modifying a 3' terminus of a pre-selected DNA sequence, useful for
XX labeling and modifying 3'-termini of other nucleic acids, comprises using
XX a synthetic nucleotide template with a defined overhang nucleotide.

XX

PS Example 5; Col 13; 22pp; English.

CC The sequence represents a synthetic DNA template molecule used to

CC demonstrate the method of the invention. The invention relates to a

CC method of modifying (e.g. 3' end labelling with 32p dATP) the 3' terminus

CC of an RNA molecule by providing a DNA oligonucleotide, complementary to

CC the 3' end of the RNA molecule, with an overhang at the 5' end which

CC allows incorporation of the labeling nucleotide into the RNA molecule.

CC The method, based on the synthesis of Okazaki fragments, is useful for

CC labeling and modifying the 3'-termini of other nucleic acids such as DNA

CC fragments. The method is a simple and efficient way of labeling or

CC modifying RNA 3'-termini using DNA polymerase and a synthetic template

CC with defined overhang nucleotides

XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 430

AAD16997/C

ID AAD16997 standard; DNA; 20 BP.

XX

AC AAD16997;

XX

DT 29-NOV-2001 (first entry)

XX

DE Capture probe CP5'.

XX

XX Scaffold protein; antibody mimic; fibronectin type III domain;

KW randomised loop; randomised beta-sheet; diagnostic purpose;

KW protein designing; probe; tenth module of human Fn3; 10Fn3;

KW Fibronectin module of type III; Fn3; ss.

XX

OS Unidentified.

XX

XX WO200164942-A1.

XX

PD 07-SEP-2001.

XX

PF 28-FEB-2001; 2001WO-US006414.

XX

PR 29-FEB-2000; 2000US-00515260.

XX

PA (PHYL-) PHYLLOS INC.

XX

PI Lipovsek D, Wagner RW, Kuimelis RG;

XX

XX WPI; 2001-557782/62.

XX

PT Fibronectin scaffold protein array for obtaining a protein/compound which

PT binds to a compound/protein, comprises a fibronectin type III domain

PT having a randomized loop, a randomized beta-sheet or their combination.

XX

PS Disclosure; Page 41; 67pp; English.

XX

CC The present invention relates to an array of proteins (antibody mimics)

CC comprising a fibronectin type III domain having a randomised loop, a

CC randomised beta-sheet, or their combination, and has the capacity to bind

CC to a compound that is not bound by a corresponding naturally- occurring

CC fibronectin, immobilised onto a solid support. The antibody mimics is

CC useful for detecting a compound preferably a protein, in a biological

CC sample. It is also useful to detect one or more different analytes

CC simultaneously in a sample. Hence is useful for diagnostic purposes. It

CC is also useful for the purpose of designing proteins capable of binding

CC to virtually any compound of interest. The present sequence is a capture

CC probe used to self-assemble and anchor the tenth module of human

CC fibronectin module of type III (Fn3) (10Fn3) which is used in an

CC exemplification of the invention

XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 431

AAF60896

ID AAF60896 standard; DNA; 20 BP.

XX

AC AAF60896;

XX

DT 15-MAY-2001 (first entry)

XX

DE Conjugate forming oligonucleotide ON5 SEQ ID 5.

XX

KW Transport; membrane; cytostatic; virucide; vasotropic; dermatological;

KW antiporiatic; antiasthmatic; gene therapy; tumor cell; antisense;

KW tumor therapy; drug; phosphodiester linkage; ss.

XX

OS Unidentified.

XX

XX DE19935302-A1.

XX

PD 08-FEB-2001.

XX

PF 28-JUL-1999; 99DE-01035302.

XX

PR 28-JUL-1999; 99DE-01035302.

XX

PA (AVET) AVENTIS PHARMA DEUT GMBH.

XX

PI Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;

XX

XX WPI; 2001-203679/21.

XX

PT New substituted aryl conjugates of parent molecules, especially

PT oligonucleotides, having improved transmembrane and intracellular

PT transport properties, useful as medicaments or diagnostic agents.

XX

PS Disclosure; Page 9; 28pp; German.

XX

CC This invention describes a novel conjugate (I) which consists of (A) a

CC molecule to be transported and (B) at least one aryl residue of formula -

CC Ar-(X-C(Y)-R₁)_n (II), Ar = group containing at least one aromatic ring;

CC X = O or N (sic); Y = O, S or NH-R₂ (sic); R₁ = optionally substituted

CC 1-23C alkyl (optionally containing double and/or triple bonds); R₂ =

CC optionally substituted 1-18C alkyl (optionally containing double and/or

CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or

CC via a chemical group, provided that the chemical group is other than CH₂

CC -S if the bond is via a phosphodiester linkage of (A). The invention also

CC describes (i) the preparation of a conjugate (I') of (A') a molecule to

CC be transported and (B') at least one aryl residue (not restricted to

CC (II)), by preparing (A') containing a reactive function at the position

CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');

CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical

CC group) for transporting (A) across biological membranes. The products of

CC the invention have cytostatic, virucide, vasotropic, dermatological,

CC antiporiatic and antiasthmatic activity and can be used for gene

CC therapy. Conjugation of (A) with (B) is useful for transporting (A)

CC across biological membranes or into eukaryotic or prokaryotic cells

CC (specifically bacterial, yeast or mammalian cells, including human cells,

CC particularly tumor cells). Medicaments, diagnostic agents and test kits

CC containing (I) are also claimed. Typically (I) are antisense

CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for

CC treating viral infections or diseases associated with integrins or cell-
 CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
 CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
 CC hybridization. Conjugation with (B) markedly improves the cellular uptake
 CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
 CC in which case the conjugates (I) are fluorescently labeled, allowing
 CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
 CC is superior to that obtained using other conjugated groups related to
 CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
 CC the scope of (B)) have superior uptake to corresponding fluorescein
 CC conjugates

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 432

AAS63428
 ID AAS63428 standard; DNA; 20 BP.

XX AAS63428;

XX 29-JAN-2002 (first entry)

XX Oligonucleotide-nanoparticle probe #52.

DE Oligonucleotide-nanoparticle probe; diagnostic; forensic analysis;
 KW nucleic acid detection; nanostructure; biochip; biofilter; drug delivery;
 KW ss.

XX Synthetic.

XX WO200173123-A2.

XX 04-OCT-2001.

XX 28-MAR-2001; 2001WO-US010071.

XX 28-MAR-2000; 2000US-0192699P.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

PR 26-JUN-2000; 2000US-0213906P.

PR 08-DEC-2000; 2000US-0254392P.

PR 11-DEC-2000; 2000US-0255235P.

PR 12-JAN-2001; 2001US-00760500.

PR 28-MAR-2001; 2001US-00820279.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 Taton TA, Park S, Li Z;

XX WPI; 2001-656926/75.

XX Detecting and separating nucleic acid, useful e.g. for diagnosis,
 PT comprises reaction with nanoparticles that carry oligonucleotides
 PT complementary to parts of the target.

XX Example 18; Page 158; 40pp; English.

XX The invention relates to a method for detection of nucleic acid (I)
 CC having at least 2 portions, comprising treatment with nanoparticles that
 CC carry oligonucleotides complementary to at least 2 parts of (I), where
 CC detectable change caused by hybridisation of the oligonucleotide to (I)
 CC is observed. The method is used to detect (or to separate) specific (I),
 CC e.g. for diagnosing a wide variety of diseases, sequencing, in forensic

CC analysis etc., and generally to detect analytes other than (I). The
 CC oligonucleotide-derivatised nanoparticles are also useful for preparing
 CC nanostructures useful, for example, as biochips, biofilters, mechanical
 CC devices, separation membranes, chemical sensors, in computers, and for
 CC drug delivery. Very stable nanoparticle-oligonucleotide conjugates can be
 CC produced, allowing their direct use (as probes) in polymerase chain
 CC reaction, i.e. they survive multiple heating/cooling cycles so do not
 CC need to be added after amplification. (I) are detected by simple colour
 CC change, without the need for special equipment making possible rapid
 CC field testing for e.g. pathogens. AAS63374-AAS63448 represent
 CC oligonucleotide-nanoparticle probes, and related sequences, used in the
 CC method of the invention

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 433

AAD03632
 ID AAD03632 standard; DNA; 20 BP.

XX AAD03632;

XX 19-JUN-2001 (first entry)

XX Human ku autoantigen amplifying KU_REV primer.

DE Human; natural antisense mRNA enrichment; antisense-based therapy;
 KW RT-PCR primer; ku autoantigen; ss.

XX Homo sapiens.

XX WO200125488-A2.

XX 12-APR-2001.

XX 06-OCT-2000; 2000WO-US027557.

XX 06-OCT-1999; 99US-0157843P.

XX (QUAR-) QUARK BIOTECH INC.

XX Gilad S, Einat P, Grossman A;

XX WPI; 2001-266326/27.

XX Enrichment and detection of natural antisense mRNA comprises generating
 PT double stranded hybrid cDNA using a polymerase with an exonuclease
 PT activity, amplifying using a DT primer and cloning.

XX Example; Page 12; 37pp; English.

XX The invention relates to a method for enrichment of natural antisense
 CC messenger RNA. This method involves generating a population of cDNA from
 CC mRNA, incubating the generated cDNA to produce double stranded hybrid DNA
 CC molecules consisting of sense and antisense cDNA, treating the hybrid
 CC molecules using DNA polymerase with an exonuclease activity, amplifying
 CC the double stranded molecule using a deoxythymidine (dT) primer and
 CC cloning the amplified double stranded molecule. This method is useful for
 CC enrichment of natural antisense mRNA from any natural source of RNA. It
 CC is used to detect whether mRNAs have a natural anti-sense counterpart.
 CC The method provides a basis for finding new genes with important cellular
 CC regulatory roles or new regulatory information for known genes and
 CC provides a starting material for development of an antisense-based
 CC therapeutic to treat a disease in which down regulation or inhibition of
 CC the sense gene or transcript is involved. The present sequence is KU_REV

CC reverse transcription PCR (RT-PCR) primer used for amplifying human ku
 CC autoantigen sequence. This primer is used in endogenous antisense
 CC identification (EASI) procedure for enrichment of natural antisense mRNA
 XX
 SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2010 TCATGGCAACTCCAGAGCAG 2029
 Db 1 TCATGGCAACTCCAGAGCAG 20

RESULT 434
 AAF28481
 ID AAF28481 standard; DNA; 20 BP.

XX AAF28481;
 AC
 XX 03-APR-2001 (first entry)
 DT
 XX
 XX
 DE Random oligonucleotide, SEQ ID NO: 53.

XX Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
 KW disease diagnosis; forensic analysis; DNA sequencing; paternity testing;
 KW cell line authentication; gene therapy; ss.
 XX
 XX Synthetic.

XX WO200100876-A1.
 PN
 XX
 XX 04-JAN-2001.

XX 26-JUN-2000; 2000WO-US017507.
 PF
 XX
 XX 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.

XX (MIRK/) MIRKIN C A.
 PA (LETS/) LETSINGER R L.
 PA (MUCI/) MUCIC R C.
 PA (STOR/) STORHOFF J J.
 PA (ELGH/) ELGHANIAN R.
 PA (TATO/) TATON T A.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;

XX WPI; 2001-061976/07.

XX Detecting nucleic acid, useful for e.g. diagnosis of diseases, forensics
 XX and DNA sequencing; comprises observing detectable change brought about
 PT by hybridization of nucleic acid with substrate or particle bound
 PT oligonucleotides.

XX Disclosure; Page 199; 205pp; English.

XX The present sequence is an oligonucleotide used in a method for detecting
 CC a nucleic acid having at least 2 portions. The method comprises
 CC hybridising the nucleic acid with oligonucleotides, such as the present
 CC sequence, attached to a substrate and/or particle and detecting a change
 CC in colour, conductivity or optical density. The method is useful for the
 CC diagnosis and/or monitoring of diseases, in forensics, in DNA sequencing,
 CC for paternity testing, for cell line authentication and for monitoring
 CC gene therapy. Detecting nucleic acids based upon observing a colour
 CC change is cheap, fast, simple, and does not require specialised or
 CC expensive equipment. The nanoparticle oligonucleotide conjugates remain
 CC stable for at least 6 months. A single base mismatch and as little as 20
 CC femtomoles (fM) of target can be detected using the conjugates

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 435
 AAS10371
 ID AAS10371 standard; DNA; 20 BP.

XX AAS10371;
 AC
 XX 24-OCT-2001 (first entry)
 DT
 XX
 XX Oligonucleotide-cyclic disulphide linker, d.

XX Nanoparticle; cyclic disulphide-oligonucleotide; DNA detection;
 KW DNA isolation; genetic disease; bacterial disease; viral disease;
 KW forensic science; paternity testing; gene therapy; ss.
 XX Synthetic.

XX Key Location/Qualifiers
 FH misc_feature 1
 FT /tag= a
 FT /note= "A is covalently linked to a cyclic-disulphide
 FT moiety"

XX WO200151665-A2.

XX 19-JUL-2001.

XX 12-JAN-2001; 2001WO-US001190.

XX 13-JAN-2000; 2000US-0176409P.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX 12-JAN-2001; 2001US-00760500.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA, Li Z;

XX WPI; 2001-451868/48.

XX Detecting a nucleic acid useful in e.g. diagnosing genetic, bacterial or
 XX viral diseases, by contacting the nucleic acid with oligonucleotides
 PT attached to nanoparticles and having sequences complementary a portion of
 PT the nucleic acid.

XX Example 24; Fig 44; 323pp; English.

XX The sequence represents a cyclic disulphide linked oligonucleotide which
 CC may be coupled with colloidal gold particles (nanoparticles) and used to
 CC demonstrate the method of the invention. The invention relates to
 CC isolating or detecting a nucleic acid of interest, in a mixture of
 CC nucleic acids, by binding it to 2 or more complementary nucleotides which
 CC have a nanoparticle attached to their 5' ends. The nanoparticles (e.g.
 CC colloidal gold) are used to both isolate and detect (e.g. by linking the
 CC particle to a fluorescent probe) the resultant complex. The methods are
 CC useful for detecting nucleic acids, natural or synthetic, and modified or
 CC unmodified. The methods may also be applied in the diagnosis of genetic,
 CC bacterial and viral diseases, in forensics, in DNA sequencing, for
 CC paternity testing, for cell line authentication, and for monitoring gene
 CC therapy. The methods are further useful in research and analytical
 CC laboratories in DNA sequencing, in the field to detect the presence of
 CC specific pathogens, for quick identification of an infection to assist in
 CC drug prescription, and in homes and health centres for inexpensive first-

CC line screening. The methods, which are based on observing colour change
 CC with the naked eye, are cheap, fast, simple, robust (reagents are
 CC stable), do not require specialised or expensive equipment, and little or
 CC no instrumentation is required

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 436

AAF99427/C
 ID AAF99427 standard; DNA; 20 BP.

XX AAF99427;

DT 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #543.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 49; 338pp; English.

XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-todent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 437

AAF99099/C

ID AAF99099 standard; DNA; 20 BP.

XX AAF99099;

XX 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #215.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 42; 338pp; English.

XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1


```

FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothioate"
FT modified_base 1
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Modified with 2'-O-methyl"
XX US6242591-B1.
XX 05-JUN-2001.
XX 11-JAN-2000; 2000US-00481486.
XX 15-OCT-1997; 97US-00950779.
XX (ISIS-) ISIS PHARM INC.
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX WPI; 2001-407218/43.
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 23; Col 11; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesizing sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 441
AAH78547
ID AAH78547 standard; CDNA; 20 BP.
AC AAH78547;
XX 10-DEC-2001 (first entry)
XX Nucleotide sequence of a cDNA sequence.
XX
XX Nucleic acid identification; DNA library screening; ss.
XX Synthetic.
XX US6274321-B1.
XX 14-AUG-2001.
XX 03-DEC-1999; 99US-00454704.
XX 03-DEC-1999; 99US-00454704.
XX

```

```

PA (REGC ) UNIV CALIFORNIA.
XX Blumberg B;
XX WPI; 2001-588900/66.
XX
XX Screening nucleic acids (NA) in pool of interest comprises pooling,
XX expressing NA to form expression product pool and identifying NA in NA
XX pool corresponding to expression product pool having interaction with
XX target moiety.
XX
XX Disclosure; Col 22; 19pp; English.
XX
XX The specification describes a method for identifying a nucleic acid in a
XX pool of interest. The method comprises pooling individually identifiable
XX nucleic acids into at least two pools of one nucleic acid each;
XX expressing nucleic acid pools to obtain protein expression product pools;
XX assaying protein expression product pools for products having interaction
XX with target molecule; selecting nucleic acid pools corresponding to
XX identified protein expression product pools; and identifying individual
XX nucleic acids in identified nucleic acid pools. The method is useful for
XX identifying a nucleic acid (e.g. cDNA) in a pool of interest and for
XX functionally screening several nucleic acids. The method is also useful
XX for screening genomic DNA libraries or other source of individual cDNAs,
XX mRNAs, synthetic libraries of nucleic acids e.g. combinatorial libraries.
XX The present sequence was used in the course of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 442
AAH28351
ID AAH28351 standard; DNA; 20 BP.
XX
XX AAF28351;
XX 02-APR-2001 (first entry)
XX
XX DNA oligomer #1.
XX
XX Deoxynucleic S-Methylthiouracil; DNmt; antisense therapy;
XX cardiovascular disease; inflammatory disease; neurocellular disease;
XX antiviral therapy; human immunodeficiency virus; human-cytomegalovirus;
XX influenza; herpes; infection; ss.
XX
XX Unidentified.
XX
XX US6169176-B1.
XX
XX 02-JAN-2001.
XX
XX 28-SEP-1999; 99US-00407675.
XX
XX 02-JUL-1998; 98US-0091481P.
XX 11-DEC-1998; 98US-0111800P.
XX 02-JUL-1999; 99US-00347443.
XX
XX (REGC ) UNIV CALIFORNIA.
XX Dev AP, Bruce TC;
XX
XX WPI; 2001-122276/13.
XX
XX Preparing novel deoxynucleic alkyl thiouracil oligonucleotide for use in
XX antisense therapy, by synthesizing oligonucleotides comprising backbone
XX

```


PT of alkyl or alkoxy thiourea linkages in solution or on solid phase.
 XX Example 7; Fig 16; 48pp; English.
 XX
 CC The present sequence was used to demonstrate the ability of deoxynucleic
 CC S-methylthiourea (DMNT) compounds to form triplexes with DNA oligomers. An
 CC increase in the C content of the oligos resulted in a large decrease in
 CC binding. This experiment was performed as an example of a method for
 CC preparing oligonucleotides comprising a backbone of alkyl or alkoxy
 CC thiourea linkages. The method is useful for preparing oligonucleotides
 CC for use in antisense or antigenic therapy, to inhibit production of
 CC proteins associated with genetic diseases, cardiovascular, inflammatory
 CC and neurocellular diseases, and for antiviral therapy, e.g. to treat
 CC human immunodeficiency virus, human cytomegalovirus, influenza and herpes
 CC infections. The compounds are also useful as diagnostic reagents to
 CC detect the presence or absence of the target DNA or RNA sequences to
 CC which they specifically bind and by antagonising the normal biological
 CC activity of a target protein, they can be used in the manipulation of
 CC tissue e.g. tissue differentiation, both in vivo and in ex vivo tissue
 CC cultures. The method provides an efficient and rapid solid-phase method
 CC for the synthesis of thiourea and S-methylthiourea
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 443
 AAS04112/C
 ID AAS04112 standard; DNA; 20 BP.
 XX
 AC AAS04112;
 XX
 DT 29-AUG-2001 (first entry)
 XX
 DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
 XX
 KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
 KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
 KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN USG207417-B1.
 XX
 PD 27-MAR-2001.
 XX
 PF 07-JUN-1995; 95US-00482918.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 21-DEC-1993; 93US-00172329.
 XX
 XX (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 PI Zaebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX WPI; 2001-298941/31.
 DR
 XX Novel nucleic acids encoding stem cell factor useful for treating
 PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's

PT disease, Kala azar, anemia and septicemia.
 XX Example 3; Fig 12C; 209pp; English.
 XX
 CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
 CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
 CC SCF (stem cell factor) cDNA sequence. The present invention relates to
 CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
 CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
 CC including early haematopoietic progenitor cells. The invention also
 CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
 CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
 CC The polynucleotide encoding SCF is useful for producing SCF and useful in
 CC gene therapy. It is useful for treating disorders involving blood cells
 CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
 CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
 CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
 CC disseminated fungus disease, fulminating septicemia, malaria, vitamin B12
 CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
 CC disorders such as piebaldism and vitiligo
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAA 2726
 DB 20 CTAATAAAAAAAAAAAAAA 1
 RESULT 444
 AAH45787
 ID AAH45787 standard; DNA; 20 BP.
 XX
 AC AAH45787;
 XX
 DT 07-SEP-2001 (first entry)
 XX
 DE Human KUAPP70 gene PCR primer SEQ ID NO: 39.
 XX
 KW Nucleic acid amplification; adapter DNA; human; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200138572-A1.
 XX
 PD 31-MAY-2001.
 XX
 PF 16-NOV-2000; 2000WO-JP008073.
 XX
 PR 19-NOV-1999; 99JP-00330726.
 PR 25-JUL-2000; 2000JP-00224663.
 XX
 PA (TAKI) TAKARA SHUZO CO LTD.
 XX
 PI Aoyagi K, Sasaki H, Terada M, Mineno J, Asada K, Kato I;
 XX WPI; 2001-355947/37.
 DR
 XX Amplifying nucleic acids with base sequences of mRNAs in sample while
 PT sustaining the ratio among them used to monitor mRNA expression,
 PT applicable in producing e.g. cRNA library and DNA microarrays.
 XX
 PS Example 1; Page 63; 67pp; Japanese.
 XX
 CC The present invention describes a method of amplifying nucleic acids,
 CC involving forming a single-stranded DNA to an mRNA in a sample with a
 CC primer, synthesising a DNA strand complementary to the single-stranded
 CC DNA to form a double-stranded DNA, adding a single or double-stranded
 CC adapter DNA to the double-stranded DNA, and amplifying the DNA strand
 CC using a second primer with a nucleic acid sequence in the adapter DNA.

CC This can be used to amplify nucleic acids to monitor mRNA expression,
 CC which is applicable in producing e.g. cDNA libraries, cDNA libraries, DNA
 CC microarrays or membrane arrays in gene engineering and gene expression
 CC analysis, and in drug development and health maintenance and management.
 CC The present sequence is a PCR primer described in the exemplification of
 CC the invention

SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1745 CCTCCCTGTCGTGACCC 1764
 DB 1 CCTCCCTGTCGTGACCC 20

RESULT 445
 AAF89092/c
 ID AAF89092 standard; DNA; 20 BP.

XX AAF89092;

DT 13-JUL-2001 (first entry)

XX Mammalian stem cell factor PCR primer SEQ ID NO: 33.

DE Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
 KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
 KW neurological damage; intestinal damage; infertility; AIDS; SCID;
 KW severe combined immunodeficiency; PCR primer; ss.

XX Mammalia.

XX US6207802-B1.

XX 27-MAR-2001.

XX 09-NOV-1994; 94US-00336728.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 25-NOV-1992; 92US-00982255.

XX (AMGE-) AMGEN INC.

XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

XX WPI; 2001-353108/37.
 PT Novel isolated non-human mammalian stem cell factor polypeptide
 PT stimulating growth of early hematopoietic progenitor cells, useful for
 PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
 PT sarcoidosis.

XX Example 3; Fig 12C; 209pp; English.

CC The present invention provides the protein and coding sequences of
 CC mammalian stem cell factors (SCFs). These are capable of stimulating the
 CC growth of early hematopoietic progenitor cells, neural stem cells and
 CC primordial germ stem cells. The sequences are useful in the treatment of
 CC leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
 CC nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
 CC and intestinal damage, infertility, AIDS and severe combined
 CC immunodeficiency (SCID). The present sequence is primer used to amplify
 CC an SCF in the exemplification of the invention

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAAAA 2726
 DB 20 CTAAAAA 1

RESULT 446

AAH23890/c
 ID AAH23890 standard; DNA; 20 BP.

XX AAH23890;

XX 07-AUG-2001 (first entry)

XX Human SCF (stem cell factor) cDNA universal PCR primer 220-7.

XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
 KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
 KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
 KW PCR primer; ss.

XX Homo sapiens.

XX US6204363-B1.

XX 20-MAR-2001.

XX 25-NOV-1992; 92US-00982255.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 10-APR-1991; 91US-00684535.

XX (AMGE-) AMGEN INC.

XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

XX WPI; 2001-256683/26.
 PT New stem cell factor polypeptides and their analogs which stimulate
 PT growth of early hematopoietic progenitors, useful for treating aplastic
 PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
 PT disease.

XX Example 3; Fig 12C; 166pp; English.

XX The present sequence for universal PCR primer 220-7 is 1 of 8 universal
 CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
 CC SCF (stem cell factor) cDNA sequence. The present invention relates to
 CC novel stem cell factors (AAH23561-AAH23568, AAB73571-AAH23576) and the
 CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
 CC including early haematopoietic progenitor cells. The invention also
 CC describes SCF peptides (AAB73578-AAH23597) and the oligonucleotides
 CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
 CC The polynucleotide encoding SCF is useful for producing SCF and useful in
 CC gene therapy. It is useful for treating disorders involving blood cells
 CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
 CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
 CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
 CC disseminated fungal disease, Fulminating septicemia, malaria, vitamin
 CC B12 and folic acid deficiency, pyridoxine deficiency, and
 CC hypopigmentation disorders such as piebaldism and vitiligo

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 447
AAS04213/c
ID AAS04213 standard; DNA; 20 BP.
XX AC AAS04213;
XX DT 29-AUG-2001 (first entry)
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6218148-B1.
XX PD 17-APR-2001.
XX PF 21-DEC-1993; 93US-00172329.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSELMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX WPI; 2001-281051/29.
XX DR
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX PT stimulating growth of early hematopoietic progenitor cells.
XX PS Example 3; Fig 12C; 167pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
XX CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX CC cells including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
XX CC disorders such as piebaldism and vitiligo.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 449
AAS04213/c
ID AAS04213 standard; DNA; 20 BP.
XX AC AAS04213;
XX DT 29-AUG-2001 (first entry)
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6218148-B1.
XX PD 17-APR-2001.
XX PF 21-DEC-1993; 93US-00172329.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSELMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX WPI; 2001-281051/29.
XX DR
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX PT stimulating growth of early hematopoietic progenitor cells.
XX PS Example 3; Fig 12C; 167pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
XX CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX CC cells including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
XX CC disorders such as piebaldism and vitiligo.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

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RESULT 448
AAS10448/c
ID AAS10448 standard; DNA; 20 BP.
XX AC AAS10448;
XX DT 24-OCT-2001 (first entry)
XX DE Human stem cell factor (SCF) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; haematopoietic progenitor cell;
XX KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
XX KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX OS Homo sapiens.
XX PN US6248319-B1.
XX PD 19-JUN-2001.
XX PF 24-MAY-1995; 95US-00449653.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSELMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX WPI; 2001-407312/43.
XX DR
XX PT Increasing the number of early hematopoietic progenitor cells in the
XX PT peripheral blood useful for the treatment of blood disorders including
XX PT Hodgkin's disease comprises the administration of human stem cell factor.
XX PS Example 3; Fig 12C; 210pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 19 PCR
XX CC primers (AAS10435-AAS10453) used to amplify various portions of the human
XX CC SCF cDNA sequence. The sequence is described in an invention relating to
XX CC novel stem cell factors, the polynucleotides encoding them and methods
XX CC for producing the stem cell factors. The methods involve increasing the
XX CC number of early haematopoietic progenitor cells in human peripheral blood
XX CC by administering a haematopoietically effective human stem cell factor
XX CC polypeptide. The methods are useful for the treatment of blood disorders,
XX CC including myelofibrosis, myelocytosis, osteopetrosis, metastatic
XX CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,
XX CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,
XX CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation
XX CC disorders i.e. piebaldism and viral induced disorders, including AIDS
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 449
AAS77742/c
ID AAS77742 standard; DNA; 20 BP.

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XX ABS77742;
AC
XX
XX
XX 13-DEC-2002 (first entry)
DT
XX
XX Angiogenesis inhibitory oligonucleotide #226.
DE
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX Synthetic.
OS
XX WO200253141-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 14-DEC-2001; 2001WO-US048458.
PF
XX
XX 14-DEC-2000; 2000US-0255534P.
PR
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX
XX Bratzler RL;
PI
XX
XX WPI; 2002-566690/60.
DR
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
PT
XX
XX Claim 2; Page 23; 276pp; English.
PS
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 450
ABS78072/c
ID ABS78072 standard; DNA; 20 BP.
XX
AC ABS78072;
XX
XX 13-DEC-2002 (first entry)
DT
XX
XX Angiogenesis inhibitory oligonucleotide #556.
DE
XX

```

```

KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX Synthetic.
OS
XX WO200253141-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 14-DEC-2001; 2001WO-US048458.
PF
XX
XX 14-DEC-2000; 2000US-0255534P.
PR
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX
XX Bratzler RL;
PI
XX
XX WPI; 2002-566690/60.
DR
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
PT
XX
XX Claim 2; Page 29; 276pp; English.
PS
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 451
ABS78076
ID ABS78076 standard; DNA; 20 BP.
XX
AC ABS78076;
XX
XX 13-DEC-2002 (first entry)
DT
XX
XX Angiogenesis inhibitory oligonucleotide #560.
DE
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW

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KW scleroderma; hypertrophic scar.
 XX Synthetic.
 OS
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 XX 14-DEC-2001; 2001WO-US048458.
 PF
 XX 14-DEC-2000; 2000US-0255534P.
 PR
 XX (COLE-) COLEY PHARM GROUP INC.
 PA
 XX Bratzler RL;
 PI
 XX WPI; 2002-566690/60.
 DR
 XX
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 PT
 XX
 XX Claim 2; Page 29; 276pp; English.
 PS
 XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 452
 ABL39402/C
 ID ABL39402 standard; DNA; 20 BP.
 XX
 XX ABL39402;
 AC
 XX 16-APR-2002 (first entry)
 DT
 XX Immunostimulatory nucleic acid SEQ ID NO: 838.
 DE
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 XX WO200197843-A2.
 PN
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 PD

XX 22-JUN-2001; 2001WO-US020154.
 PF
 XX 22-JUN-2000; 2000US-0213346P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 DR
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 PT
 XX Disclosure; Page 309; 312pp; English.
 PS
 XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 453
 ABL38648
 ID ABL38648 standard; DNA; 20 BP.
 XX
 XX ABL38648;
 AC
 XX 16-APR-2002 (first entry)
 DT
 XX Immunostimulatory nucleic acid SEQ ID NO: 2.
 DE
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; ss.
 XX
 XX Synthetic.
 OS
 XX WO200197843-A2.
 PN
 XX 27-DEC-2001.
 PD
 XX 22-JUN-2001; 2001WO-US020154.
 PF
 XX 22-JUN-2000; 2000US-0213346P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 PD
 XX

PT Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 95; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 454
ABL39403/C
ID ABL39403 standard; DNA; 20 BP.

AC ABL39403;
XX
DT 16-APR-2002 (first entry)
DE Immunostimulatory nucleic acid SEQ ID NO: 839.

XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cycostatic; ss.
XX Synthetic.
XX WO200197843-A2.
XX 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.
XX 22-JUN-2000; 2000US-0213346P.
XX (IOWA) UNIV IOWA RES FOUND.
XX Weiner G, Hartmann G;
XX WI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 309; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for

CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 455
ABL54775/C
ID ABL54775 standard; DNA; 20 BP.

AC ABL54775;
XX
DT 10-JUN-2002 (first entry)
DE CD14 receptor PCR primer SEQ ID NO 9.

XX Angiotensin-I converting enzyme; ACE; CD14; receptor; SNP;
KW single-nucleotide polymorphism; PCR; primer; ss.
XX Synthetic.
XX JP2002034599-A.
XX 05-FEB-2002.

XX 26-JUL-2000; 2000JP-00225354.
XX 26-JUL-2000; 2000JP-00225354.
XX (TOYM) TOYOCO KK.
XX WPI; 2002-275727/32.

XX Detecting 1 base polymorphism on a sequence of a chromosome or it's
PT fragment.

XX Example 2; Page 10; 10pp; Japanese.

XX The invention relates to a method for detecting 1 base polymorphism on
CC the sequence of a chromosome or its fragment in which a sample nucleic
CC acid is reacted with a reaction liquor containing a nucleic acid primer
CC having a base adjacent to the polymorphic base at its 3'-end, one
CC dideoxynucleotide corresponding to a polymorphic base having a
CC distinguishable feature or its mixture, DNA polymerase and a composition
CC required for its activity expression to detect the presence of taking
CC dideoxynucleotide in the nucleic acid primer and to detect the type of
CC the base to be specified. The method is used for detecting 1 base
CC polymorphism on the sequence of a chromosome or its fragment. The present
CC sequence is that of a PCR primer, useful in examples of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

```

Db      20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 456
ABK65035
ID      ABK65035 standard; DNA; 20 BP.
XX
AC      ABK65035;
XX
DT      02-JUL-2002 (first entry)
XX
DE      Nanoparticle-oligonucleotide #55.
XX
KW      Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
KW      ss.
XX
OS      Synthetic.
XX
PN      WO200218643-A2.
XX
PD      07-MAR-2002.
XX
PF      10-AUG-2001; 2001WO-US025237.
XX
PR      11-AUG-2000; 2000US-0224631P.
PR      08-DEC-2000; 2000US-0254392P.
PR      11-DEC-2000; 2000US-0255235P.
PR      12-JAN-2001; 2001US-00760500.
PR      28-MAR-2001; 2001US-00820279.
XX
PA      (NANO-) NANOSPHERE INC.
XX
PI      Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI      Taton TA, Garimella V, Li Z, Park S;
XX
DR      WPI; 2002-258024/30.
XX
PT      Detecting nucleic acid, useful for diagnosis of genetic, viral or
PT      bacterial disease, comprises hybridizing nanoparticles with attached
PT      oligonucleotides to nucleic acid and detecting change brought about by
PT      hybridization.
XX
PS      Example 18; Page 410; 412pp; English.
XX
CC      The invention relates to a method of detecting a nucleic acid (NA) having
CC      at least 2 portions comprising: (a) providing nanoparticles (NP) with
CC      attached oligonucleotides (OGN), where OGN has a sequence complementary
CC      to the sequence of NA; (b) contacting NA and NP under conditions
CC      effective to allow hybridisation of OGN with NA; and (c) observing a
CC      detectable change brought about by hybridisation of OGN with NA. The
CC      method is useful for detecting a nucleic acid, separating a selected
CC      nucleic acid from others and methods of nanofabrication. Detecting
CC      analytes such as nucleic acids and proteins are useful for the diagnosis
CC      of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
CC      cyclic disulphide linkers improve the sensitivity of diagnostic assays.
CC      In particular assays using OGN-NP conjugates prepared using linkers
CC      comprising a steroid residue attached to a cyclic disulphide have been
CC      found to be approximately 10 times more sensitive than assays employing
CC      conjugates prepared using alkanethiols or acyclic disulphides as the
CC      linker. The OGN-NP conjugates are stable allowing them to be used
CC      directly in PCR solutions. Therefore conjugates added as probes to a DNA
CC      target to be PCR amplified can be carried through the 30 or 40 heating
CC      cooling cycles of the PCR and are still able to detect the amplicons
CC      without opening the tubes and causing contamination. ABK64981-ABK65055
CC      represent nanoparticle-oligonucleotides of the invention
XX
SQ      Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db      1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 457
ABK65050
ID      ABK65050 standard; DNA; 20 BP.
XX
AC      ABK65050;
XX
DT      02-JUL-2002 (first entry)
XX
DE      Nanoparticle-oligonucleotide #70.
XX
KW      Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
KW      ss.
XX
OS      Synthetic.
XX
PN      WO200218643-A2.
XX
PD      07-MAR-2002.
XX
PF      10-AUG-2001; 2001WO-US025237.
XX
PR      11-AUG-2000; 2000US-0224631P.
PR      08-DEC-2000; 2000US-0254392P.
PR      11-DEC-2000; 2000US-0255235P.
PR      12-JAN-2001; 2001US-00760500.
PR      28-MAR-2001; 2001US-00820279.
XX
PA      (NANO-) NANOSPHERE INC.
XX
PI      Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI      Taton TA, Garimella V, Li Z, Park S;
XX
DR      WPI; 2002-258024/30.
XX
PT      Detecting nucleic acid, useful for diagnosis of genetic, viral or
PT      bacterial disease, comprises hybridizing nanoparticles with attached
PT      oligonucleotides to nucleic acid and detecting change brought about by
PT      hybridization.
XX
PS      Example 24; Fig 44; 412pp; English.
XX
CC      The invention relates to a method of detecting a nucleic acid (NA) having
CC      at least 2 portions comprising: (a) providing nanoparticles (NP) with
CC      attached oligonucleotides (OGN), where OGN has a sequence complementary
CC      to the sequence of NA; (b) contacting NA and NP under conditions
CC      effective to allow hybridisation of OGN with NA; and (c) observing a
CC      detectable change brought about by hybridisation of OGN with NA. The
CC      method is useful for detecting a nucleic acid, separating a selected
CC      nucleic acid from others and methods of nanofabrication. Detecting
CC      analytes such as nucleic acids and proteins are useful for the diagnosis
CC      of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
CC      cyclic disulphide linkers improve the sensitivity of diagnostic assays.
CC      In particular assays using OGN-NP conjugates prepared using linkers
CC      comprising a steroid residue attached to a cyclic disulphide have been
CC      found to be approximately 10 times more sensitive than assays employing
CC      conjugates prepared using alkanethiols or acyclic disulphides as the
CC      linker. The OGN-NP conjugates are stable allowing them to be used
CC      directly in PCR solutions. Therefore conjugates added as probes to a DNA
CC      target to be PCR amplified can be carried through the 30 or 40 heating
CC      cooling cycles of the PCR and are still able to detect the amplicons
CC      without opening the tubes and causing contamination. ABK64981-ABK65055
CC      represent nanoparticle-oligonucleotides of the invention
XX
SQ      Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 458
 AAD35465/C
 ID AAD35465 standard; DNA; 20 BP.
 AC AAD35465;
 XX
 XX 25-JUL-2002 (first entry)
 XX
 DE Rat SCF 5' cDNA amplifying PCR primer, 220-7.
 XX
 XX Rat; stem cell factor; SCF protein; leucopaenia; thrombocytopaenia;
 KW anaemia; myelosuppression; nerve damage; myeloproliferative disorder;
 KW infertility; neoplasia; myelofibrosis; myelosclerosis; osteopetrosis;
 KW metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;
 KW Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;
 KW Letterer-Siwe disease; refractory erythroid leukaemia; Kala azar;
 KW Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;
 KW disseminated fungus disease; Fulminating septicaemia; piebaldism; AIDS;
 KW acquired immune deficiency syndrome; malaria; military tuberculosis;
 KW pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;
 KW Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;
 KW primer; ss.
 XX
 OS Rattus sp.
 XX
 XX US2002018763-A1.
 PN
 XX 14-FEB-2002.
 PD
 XX 12-JAN-1998; 98US-00005243.
 PF
 XX 24-MAY-1995; 95US-00449653.
 PR
 XX (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
 PI
 XX WPI; 2002-350789/38.
 DR
 XX Novel non-naturally-occurring stem cell factor polypeptide, useful for
 PT treating leucopenia, thrombocytopenia, anemia and for enhancing
 PT engraftment of bone marrow during transplantation in a mammal.
 PT
 XX Example 3; Fig 12C; 217pp; English.
 PS
 XX The present invention relates to novel non-naturally-occurring stem cell
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently
 CC duplicative of that of naturally-occurring SCF to allow possession of
 CC haematopoietic biological activity of naturally occurring SCF. Sequences
 CC of the invention are useful for treating leucopenia, thrombocytopaenia,
 CC anaemia and for enhancing bone marrow recovery in treatment of radiation,
 CC engraftment of bone marrow during transplantation in mammals and chemical
 CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
 CC are also useful for treating acquired immune deficiency in a human, nerve
 CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal
 CC damage in a mammal. SCF sequences are useful for preparing biologically
 CC active polymer polypeptide adduct, for enhancing transfection of early
 CC haematopoietic progenitor cells with a gene, and transfer of a gene into
 CC a mammal. They are useful for treating myelofibrosis, myelosclerosis,
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
 CC Letterer-Siwe disease, refractory erythroid leukaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, malaria, military

CC tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
 CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
 CC and vitiligo. The present sequence is a PCR primer which is used for
 CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 DB 20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 459
 ABS73849/C
 ID ABS73849 standard; DNA; 20 BP.
 AC ABS73849;
 XX
 XX 05-DEC-2002 (first entry)
 DT
 XX SCF universal oligonucleotide 220-7.
 DE
 XX
 XX Stem cell factor; SCF; blood-forming system; blood cell disorder;
 KW haematopoietic system; metastatic carcinoma; acute leukaemia;
 KW multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
 KW refractory erythroid leukaemia; military tuberculosis; cytostatic;
 KW disseminated fungus disease; haematopoietic; tuberculostatic;
 KW antanaemic; antifungal; antimalarial; dermatological; ss.
 XX
 OS Synthetic.
 XX
 XX EP1241258-A2.
 PN
 XX 18-SEP-2002.
 PD
 XX 04-OCT-1990; 2002EP-00008587.
 PF
 XX 16-OCT-1989; 89US-00422383.
 PR
 XX 11-JUN-1990; 90US-00537198.
 PR
 XX 24-AUG-1990; 90US-00573616.
 PR
 XX 28-SEP-1990; 90WO-US005548.
 PR
 XX 01-OCT-1990; 90US-00589701.
 PR
 XX 04-OCT-1990; 90EP-00310899.
 PR
 XX 04-OCT-1990; 95EP-00105391.
 XX
 XX (AMGE-) AMGEN INC.
 PA
 XX Zsebo KM, Suggs SV, Bosselman RA, Martin FH;
 PI
 XX WPI; 2002-684093/74.
 DR
 XX Production of a human stem cell factor (SCF) polypeptide for treating
 CC disorders involving blood cells, such as leukemia, comprises culturing
 CC mammalian cells comprising non-human SCF promoter DNA linked to DNA
 CC encoding the human SCF.
 PT
 XX Example 3; Fig 12C; 120pp; English.
 PS
 XX The present invention relates to novel stem cell factors (SCFs),
 CC polynucleotide sequences encoding the SCFs, and methods of producing
 CC them. SCFs are involved in the blood-forming (haematopoietic) system in
 CC mammals, particularly humans. The method of the invention is useful for
 CC the production of human SCF. The stem cell factors are useful to treat
 CC disorders involving blood cells e.g. metastatic carcinoma, acute
 CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
 CC erythroid leukaemia, military tuberculosis, disseminated fungus
 CC disease, malaria, and vitiligo. The present sequence representing a

```

CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 460
AAL45122/c
ID AAL45122 standard; DNA; 20 BP.
XX
AC AAL45122;
XX
DT 24-MAY-2002 (first entry)
XX
DE Oligonucleotide synthesis method related DNA #1.
XX
KW Oligonucleotide synthesis; polynucleotide array; protecting group;
KW oxidation; ss.
XX
OS Synthetic.
XX
PN EPI176151-A1.
XX
PD 30-JAN-2002.
XX
PF 27-JUL-2001; 2001EP-00118360.
XX
PR 28-JUL-2000; 2000US-00627249.
XX
PA (AGIL-) AGILENT TECHNOLOGIES INC.
XX
PI Dellinger DJ, Perbost MGM, Betley JR, Caruthers M;
XX
DR WPI; 2002-156732/21.
XX
PT Synthesis of polynucleotide useful during fabrication of an array
PT involves coupling nucleoside phosphoramidite and a solid-supported
PT nucleoside and treating the product with an oxidation/deprotection
PT composition.
XX
PS Example 1; Page 15; 36pp; English.
XX
CC The present invention relates to a method for the synthesis of a
CC polynucleotide which involves coupling a second nucleoside to a first
CC nucleoside through a phosphate linkage, where the second nucleoside has a
CC non-carbonate protecting group protecting a hydroxyl, and exposing the
CC product to a composition which concurrently oxidizes the phosphate formed
CC to a phosphate and deprotects the protected hydroxyl of the second
CC nucleoside. The method is useful for synthesizing the polynucleotides,
CC for carrying out either 3' to 5' or 5' to 3' synthesis and for
CC fabricating an addressable array of polynucleotides on a substrate. The
CC present invention is an oligonucleotide produced to demonstrate the method
CC of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAA 2728
Db 20 AAAAAA 1

RESULT 460
ABS64673
ID ABS64673 standard; DNA; 20 BP.
XX
AC ABS64673;
XX
DT 15-NOV-2002 (first entry)
XX
DE Nucleic acid detection method associated polynucleotide #55.
XX
KW Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;
KW nanoparticle; viral RNA detection; bacterial DNA detection;
KW fungal DNA detection; nanoprobe conjugate; ss.
XX

```

```

RESULT 461
ABL36232
ID ABL36232 standard; DNA; 20 BP.
XX
AC ABL36232;
XX
DT 08-APR-2002 (first entry)
XX
DE M tuberculosis rRNA probe SEQ ID NO: 83.
XX
KW Skin disorder; psoriasis; atopic dermatitis; allergic contact dermatitis;
KW alopecia areata; skin cancer; Mycobacterium vaccae; melanoma; cytostatic;
KW antipsoriatic; dermatological; antiinflammatory; antiallergic;
KW Th2 immune response; immunomodulatory; probe; ss.
XX
OS Mycobacterium tuberculosis.
XX
PN US6328978-B1.
XX
PD 11-DEC-2001.
XX
PF 02-JUN-1999; 99US-00324542.
XX
PR 23-DEC-1997; 97US-00997080.
XX
PA (GENE-) GENESIS RES & DEV CORP LTD.
XX
PI Watson JD, Tan PLJ, Prestidge R;
XX
DR WPI; 2002-138361/18.
XX
PT Inhibiting skin inflammation associated with skin disorder e.g.
PT psoriasis, by administering composition comprising delipidated and
PT deglycolipidated Mycobacterium vaccae cells or Mycobacterium vaccae
PT culture filtrate.
XX
PS Example 5; Col 99-100; 116pp; English.
XX
CC The present invention relates to a method of inhibiting skin inflammation
CC associated with a skin disorder selected from psoriasis, atopic
CC dermatitis and allergic contact dermatitis, which involves administering
CC a composition containing delipidated and deglycolipidated Mycobacterium
CC vaccae cells or M. vaccae culture filtrate. The skin disorder to be
CC treated may also include alopecia areata, and skin cancers such as basal
CC cell carcinoma, squamous cell carcinoma and melanoma. The composition
CC acts by inhibiting the Th2 immune response. The present sequence is a
CC probe described in the exemplification of the invention
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAA 2728
Db 1 AAAAAA 20

RESULT 462
ABS64673
ID ABS64673 standard; DNA; 20 BP.
XX
AC ABS64673;
XX
DT 15-NOV-2002 (first entry)
XX
DE Nucleic acid detection method associated polynucleotide #55.
XX
KW Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;
KW nanoparticle; viral RNA detection; bacterial DNA detection;
KW fungal DNA detection; nanoprobe conjugate; ss.
XX

```



```

KW Protein scaffold; antibody; binding protein; immunoglobulin;
KW tumour necrosis factor alpha; TNF-alpha; protein framework; probe; ss.
XX Synthetic.
OS
XX WO200232925-A2.
XX
XX 25-APR-2002.
XX
XX 16-OCT-2001; 2001WO-US02233.
XX
XX 16-OCT-2000; 2000US-00688566.
XX
XX (PHYL-) PHYLUS INC.
XX
XX Lipovsek D, Wagner RW, Kuimelis RG;
XX
XX WPI; 2002-444238/47.
XX
XX New non-antibody proteins having an immunoglobulin fold, useful in
XX research, therapeutic or diagnostic fields, particularly as scaffolds for
XX designing proteins with specific properties, e.g. for binding any antigen
XX of interest.
XX
XX Disclosure; Page 58; 94pp; English.
XX
XX The present invention describes a non-antibody protein, comprising a
XX domain having an immunoglobulin-like fold, derived from a reference
XX protein having a mutated amino acid sequence, where the non-antibody
XX protein binds with a Kd at least as tight as 10 nM to a compound that is
XX not bound as tightly by the reference protein. The non-antibody protein
XX is useful as scaffolds for selecting or designing a protein framework
XX with specific and favourable properties, e.g. for binding any antigen of
XX interest, or for destroying or inactivating antibody molecules. The non-
XX antibody protein is also useful in all areas where antibodies are used,
XX e.g. research, therapeutic or diagnostic fields, and for screening novel
XX binding proteins useful in the above-mentioned fields. The present
XX proteins have thermodynamic properties superior to those of natural
XX antibodies, and can be evolved rapidly in vitro. The present proteins or
XX antibody mimics exhibit improved biophysical properties, such as
XX stability under reducing conditions and solubility at high
XX concentrations. In addition, these molecules are readily expressed and
XX folded in prokaryotic systems (e.g. Escherichia coli), in eukaryotic
XX systems (e.g. yeast), or in in vitro translation systems (e.g. rabbit
XX reticulocyte lysate system). Furthermore, these proteins are extremely
XX amenable to affinity maturation techniques involving multiple cycles of
XX selection, e.g. in vitro selection using RNA-protein fusion technology,
XX phage display or yeast display systems. The present sequence is used in
XX the exemplification of the present invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 465
AAL61645
ID AAL61645 standard; DNA; 20 BP.
XX
XX AAL61645;
XX
XX 22-SEP-2003 (first entry)
XX
XX Thiol-modified oligo #4 used in the nucleic acid detection method.
XX
XX Nucleic acid detection; fabrication; ss.
XX
Protein scaffold; antibody; binding protein; immunoglobulin;
tumour necrosis factor alpha; TNF-alpha; protein framework; probe; ss.
Synthetic.
WO200232925-A2.
25-APR-2002.
16-OCT-2001; 2001WO-US02233.
16-OCT-2000; 2000US-00688566.
(PHYL-) PHYLUS INC.
Lipovsek D, Wagner RW, Kuimelis RG;
WPI; 2002-444238/47.
New non-antibody proteins having an immunoglobulin fold, useful in
research, therapeutic or diagnostic fields, particularly as scaffolds for
designing proteins with specific properties, e.g. for binding any antigen
of interest.
Disclosure; Page 58; 94pp; English.
The present invention describes a non-antibody protein, comprising a
domain having an immunoglobulin-like fold, derived from a reference
protein having a mutated amino acid sequence, where the non-antibody
protein binds with a Kd at least as tight as 10 nM to a compound that is
not bound as tightly by the reference protein. The non-antibody protein
is useful as scaffolds for selecting or designing a protein framework
with specific and favourable properties, e.g. for binding any antigen of
interest, or for destroying or inactivating antibody molecules. The non-
antibody protein is also useful in all areas where antibodies are used,
e.g. research, therapeutic or diagnostic fields, and for screening novel
binding proteins useful in the above-mentioned fields. The present
proteins have thermodynamic properties superior to those of natural
antibodies, and can be evolved rapidly in vitro. The present proteins or
antibody mimics exhibit improved biophysical properties, such as
stability under reducing conditions and solubility at high
concentrations. In addition, these molecules are readily expressed and
folded in prokaryotic systems (e.g. Escherichia coli), in eukaryotic
systems (e.g. yeast), or in in vitro translation systems (e.g. rabbit
reticulocyte lysate system). Furthermore, these proteins are extremely
amenable to affinity maturation techniques involving multiple cycles of
selection, e.g. in vitro selection using RNA-protein fusion technology,
phage display or yeast display systems. The present sequence is used in
the exemplification of the present invention
Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 466
ABZ59815/C
ID ABZ59815 standard; RNA; 20 BP.
XX
XX ABZ59815;
XX
XX 01-APR-2003 (first entry)
XX
XX Potato gene PCR primer dT20.
XX
XX Potato; plant; mitochondrial carrier protein; elongation factor EF-2;
XX transferrin binding protein; receptor-like protein kinase; helicase;
XX non-long terminal repeat retroelement reverse transcriptase;
XX overwatering; transgenic; reverse transcriptase; PCR; primer; ss.
XX
XX Synthetic.
XX
XX DE10114063-A1.
XX
XX 10-OCT-2002.
XX
Unidentified.
WO2003035829-A2.
01-MAY-2003.
08-OCT-2002; 2002WO-US032088.
09-OCT-2001; 2001US-0327864P.
07-DEC-2001; 2001US-00008978.
(NANO-) NANOSPHERE INC.
Park S, Taton TA, Mirkin CA;
WPI; 2003-430409/40.
Detecting nucleic acid having two portions, by providing nanoparticles
having oligonucleotides attached to it, contacting nucleic acid and
nanoparticles to allow hybridization, and observing detectable change.
Example 18; Page 179; 467pp; English.
The invention relates to a method of detecting a nucleic acid having two
portions. The method involves providing nanoparticles having
oligonucleotides attached to it which has a sequence complementary to
sequence of two portions of nucleic acid, contacting nucleic acid and
nanoparticles to allow hybridisation of oligonucleotides with two or more
portions of nucleic acid and observing a detectable change brought about
by hybridisation. The method and aggregate probes are useful for
detecting two or more nucleic acids (from a biological source) having at
least two portions such as viral RNA, bacterial or fungal DNA, a gene
associated with a disease, synthetic or structurally modified natural or
synthetic RNA or DNA, or a product of a polymerase chain reaction
amplification. The invention is useful for preparing a nanoprobe
conjugate for detecting an analyte and for detecting a nucleic acid bound
to an electrode surface. It is also useful for fabrication and for
separating a selected nucleic acid having two portions from other nucleic
acids. The present sequence is an oligo used to illustrate the method of
the invention
Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 466
ABZ59815/C
ID ABZ59815 standard; RNA; 20 BP.
XX
XX ABZ59815;
XX
XX 01-APR-2003 (first entry)
XX
XX Potato gene PCR primer dT20.
XX
XX Potato; plant; mitochondrial carrier protein; elongation factor EF-2;
XX transferrin binding protein; receptor-like protein kinase; helicase;
XX non-long terminal repeat retroelement reverse transcriptase;
XX overwatering; transgenic; reverse transcriptase; PCR; primer; ss.
XX
XX Synthetic.
XX
XX DE10114063-A1.
XX
XX 10-OCT-2002.
XX

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PF 22-MAR-2001; 2001DE-01014063.
XX
XX 22-MAR-2001; 2001DE-01014063.
XX
XX (MPBC-) MPB COLOGNE GMBH MOLECULAR PLANT & PROTE.
XX
XX Buelow L, Tschartnke M, Haussuehl K;
XX
XX WPI; 2003-041808/04.
XX
XX New DNA sequences from potato, useful for producing plants with altered
XX properties e.g. tolerance of flooding, also related proteins, antibodies
XX and inhibitory sequences.
XX
XX Example 1; Page 8; 26pp; German.
XX
XX The invention relates to DNA sequences (I) that encode six specific plant
XX proteins: (i) a protein (ABP60425) with mitochondrial carrier protein
XX activity (IIa); (ii) a protein (ABP60426) with transferrin binding
XX protein activity (IIB); (iii) a protein (ABP60427) with receptor-like
XX protein kinase activity (IIC); (iv) a protein (ABP60429) with non-long
XX factor EF-2 activity (IID); (v) a protein (ABP60429) with non-long
XX terminal repeat retroelement reverse transcriptase activity (IIE); or
XX (vi) a protein (ABP60430) with helicase activity (IIF). (i), also related
XX sequences, derived ribozymes and antisense sequences, expression vectors,
XX encoded proteins and antibodies against the proteins, are used to produce
XX plants with altered properties, including tolerance of overwatering. The
XX antibodies are also used for isolation of the proteins and in
XX immunosays. Also (i) or their primer or probe fragments are used to
XX screen for terminators and constitutively, aerobically or anaerobically
XX inducible plant promoters, specifically for use in potatoes and the
XX sequence that encodes (iid) is used to alter the translation profile in
XX plants. Since (i) are derived from potato, their promoters and
XX terminators provide high level transgene expression in potato, with
XX improved tissue specificity and inducibility, and can also be used to
XX control endogenous genes. The present sequence is that of a PCR primer
XX used in the first strand synthesis of cDNAs derived from potato
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 467
ABX79181
ID ABX79181 standard; DNA; 20 BP.
XX
XX ABX79181;
XX
XX 15-APR-2003 (first entry)
XX
XX Thio-modified 20da oligonucleotide.
XX
XX Nanoparticle; ss; nucleic acid detection; viral disease; probe;
XX human immunodeficiency virus infection; hepatitis virus infection;
XX herpes virus infection; cytomegalovirus infection; forensic science;
XX Epstein-Barr virus infection; bacterial disease; gene therapy;
XX sexually transmitted disease; inherited disorder; DNA sequencing;
XX paternity testing; cell line authentication.
XX
XX Synthetic.
XX
XX US2002155462-A1.
XX
XX 24-OCT-2002.
XX
XX 12-OCT-2001; 2001US-00976577.

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XX 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX Taton TA;
XX
XX WPI; 2003-198491/19.
XX
XX Detecting nucleic acids having at least 2 portions comprises use of
XX nanoparticles which have oligonucleotides attached to them that are
XX complementary to portions of the nucleic acid sequence.
XX
XX Example 18; Page 44; 130pp; English.
XX
XX The invention relates to detecting a nucleic acid (NA) having at least 2
XX portions, comprises providing a type of nanoparticles (NP) having
XX attached to oligonucleotides (O) (O) on each NP has a sequence
XX complementary to sequence of at least 2 portions of NA, contacting NA
XX and NP to allow hybridisation of (O) on NP with 2 or more portions of NA,
XX and observing a detectable change brought about by hybridisation of (O)
XX on NP with NA. The nanoparticle is useful for separating a selected
XX nucleic acid having at least 2 portions, from other nucleic acids, and
XX for detecting nucleic acids having at least 2 portions. The method of
XX using NP is useful for detecting any type of nucleic acids which may be
XX used for diagnosis of disease and in sequencing of nucleic acids.
XX Preferably, the method is useful for detecting nucleic acids for
XX diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX virus), bacterial diseases, sexually transmitted diseases, inherited
XX disorders, in forensics, in DNA sequencing, for paternity testing, for
XX cell line authentication and for monitoring gene therapy. The method is
XX useful in research and analytical laboratories in DNA sequencing and in
XX the field to detect the presence of specific pathogens. Detecting nucleic
XX acids based on observing a colour change with the naked eye is cheap,
XX fast, simple and robust, and do not require specialised expensive
XX equipment. The present sequence is a nanoparticle (e.g. gold particles)
XX labelled probe used to demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 468
ABX92177
ID ABX92177 standard; DNA; 20 BP.
XX
XX ABX92177;
XX
XX 12-MAY-2003 (first entry)
XX
XX Nanoparticle-associated oligonucleotide SEQ ID 55.
XX
XX Nonparticle; nucleic acid detection; hybridisation; diagnosis;
XX sequencing; viral infection; human immunodeficiency virus; HIV;
XX hepatitis virus; herpes virus; cytomegalovirus; Epstein-Barr virus;
XX bacterial infection; sexually transmitted disease; inherited disorder;
XX forensic; paternity testing; cell line authentication; gene therapy; ss.
XX
XX Synthetic.
XX

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XX PN US2002155459-A1.
XX PD 24-OCT-2002.
XX PF 28-SEP-2001; 2001US-00967409.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 25-JUN-1999; 99US-00240755.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2003-182627/18.
XX
XX PT Detecting nucleic acids having at least two portions involves use of
XX PT nanoparticles which have oligonucleotides attached to them that are
XX PT complementary to portions of the nucleic acid sequence.
XX
XX PS Disclosure; Page 59; 130pp; English.
XX
XX CC This invention describes a novel method of detecting nucleic acid having
XX CC at least two portions. The method involves providing nanoparticles
XX CC attached to oligonucleotides, where the oligonucleotide on each
XX CC nanoparticle have a sequence complementary to a sequence of at least two
XX CC portions of nucleic acid, contacting nucleic acid and nanoparticle to
XX CC allow hybridisation of the oligonucleotide on the nanoparticle with two
XX CC or more portions of nucleic acid and observing a detectable change
XX CC brought about by hybridisation of the oligonucleotide nanoparticle with
XX CC nucleic acid. The method is useful for separating a selected nucleic acid
XX CC having at least two portions, from other nucleic acids and for detecting
XX CC nucleic acids having at least two portions. The method is useful for
XX CC detecting any type of nucleic acids which may be used for diagnosis of
XX CC disease and in sequencing of nucleic acids. Preferably, the method is
XX CC useful for detecting nucleic acids for diagnosis and/or monitoring of
XX CC viral infections (human immunodeficiency virus (HIV), hepatitis virus,
XX CC herpes virus, cytomegalovirus and Epstein-Barr virus), bacterial
XX CC diseases, sexually transmitted diseases, inherited disorders, in
XX CC forensics, in DNA sequencing, for paternity testing, for cell line
XX CC authentication, and for monitoring gene therapy. The method is useful in
XX CC research and analytical laboratories in DNA sequencing, in the field to
XX CC detect the presence of specific pathogens. Detecting nucleic acids based
XX CC on observing a colour change with the naked eye is cheap, fast, simple
XX CC and robust and does not require specialised expensive equipment. ABX92123
XX CC -ABX92186 and ABQ77356 represent oligonucleotides used to illustrate the
XX CC method of the invention
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 469
XX ACD27255
XX ID ACD27255 standard; DNA; 20 BP.
XX
XX AC ACD27255;
XX
XX XX
XX DT 15-OCT-2003 (first entry)
XX
XX DE Nanotechnology nucleic acid detection method associated #54.

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XX
XX KW Nanotechnology; ss; nucleic acid detection; nanoparticle;
XX KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;
XX KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;
XX KW sexually transmitted disease; inherited disorder; forensic;
XX KW paternity testing; cell line authentication.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Thiol modified" "
XX
XX PN US2002155459-A1.
XX PD 24-OCT-2002.
XX
XX PF 11-OCT-2001; 2001US-00975062.
XX
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 25-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX
XX PA (NANO-) NANOSPHERE INC.
XX
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2003-228114/22.
XX
XX PT Detecting nucleic acids having 2 portions e.g. for detecting disease,
XX PT comprises use of nanoparticles which have oligonucleotides attached to
XX PT them that are complementary to portions of the nucleic acid sequence.
XX
XX PS Example 18; Page 43; 129pp; English.
XX
XX CC This invention relates to a novel method for detecting a nucleic acid
XX CC having 2 portions. The method comprises providing nanoparticles having
XX CC oligonucleotides attached, where the oligonucleotide on each nanoparticle
XX CC has a sequence complementary to a sequence of 2 portions of nucleic acid.
XX CC The nucleic acid and nanoparticle are contacted to allow hybridisation of
XX CC the oligonucleotide on the nanoparticle with two or more portions of
XX CC nucleic acid and observing a detectable change brought about by the
XX CC hybridisation. The method of the invention is useful for separating a
XX CC selected nucleic acid having 2 portions, from other nucleic acids, and
XX CC for detecting nucleic acids having 2 portions. The method of the
XX CC invention is useful for detecting any type of nucleic acids which may be
XX CC used for diagnosis of disease and in sequencing of nucleic acids.
XX CC Preferably, the method is useful for detecting nucleic acids for
XX CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX CC virus), bacterial diseases, sexually transmitted diseases, inherited
XX CC disorders, in forensics, in DNA sequencing, for paternity testing, for
XX CC cell line authentication, for monitoring gene therapy, etc. This method
XX CC involves detecting nucleic acids based on observing a colour change with
XX CC the naked eye so is cheap, fast, simple and robust, and does not require
XX CC specialised expensive equipment. The present sequence represents a thiol
XX CC modified oligonucleotide sequence used to demonstrate the method of the
XX CC invention
XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX ||||||||||||||||||

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SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 471
ACD27385
ID ACD27385 standard; DNA; 20 BP.
XX AC ACD27385;
XX DT 15-OCT-2003 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.
XX KW Nanoparticle; ss; nucleic acid detection; DNA sequencing;
XX KW pathogen detection.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified" "
XX US2002182611-A1.
XX PD 05-DEC-2002.
XX XX 28-SEP-2001; 2001US-00966491.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA;
XX WPI; 2003-596264/56.
XX Detection of nucleic acid for, e.g. research and analytical laboratories
XX in deoxyribonucleic acid sequencing, involves contacting nucleic acid
XX with nanoparticles having oligonucleotides.
XX Example 18; Page 43; 109pp; English.
XX This invention relates to a novel method for detecting a nucleic acid by
XX contacting a nucleic acid with at least two types of nanoparticles having
XX oligonucleotides attached, allowing hybridisation of the oligonucleotides
XX on the nanoparticles, and observing a detectable change. The
XX oligonucleotides on each nanoparticle have a sequence complementary to
XX its respective portion of the sequence of the nucleic acid to be
XX detected. The method of the invention may be used for the detection of a
XX nucleic acid used in, e.g. research and analytical laboratories in DNA
XX sequencing, in the field to detect the presence of specific pathogens, in
XX the doctor's office for quick identification of an infection to assist in
XX prescribing a drug for treatment, and in homes and health centres for
XX inexpensive first-line screening. The method of the invention detects
XX nucleic acids based on observing a colour change with the naked eye. This
XX method is cheap, fast, simple, robust and does not require specialised or
XX expensive equipment. The present sequence represents a thiol modified

DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 470
ACD27125
ID ACD27125 standard; DNA; 20 BP.
XX AC ACD27125;
XX DT 15-OCT-2003 (first entry)
XX DE Nanotechnology nucleic acid detection method oligonucleotide #54.
XX KW Nanotechnology; nucleic acid detection; nanoparticle; ss; forensic;
XX KW DNA sequencing; paternity testing; cell line authentication.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified" "
XX US2002164605-A1.
XX PD 07-NOV-2002.
XX XX 28-SEP-2001; 2001US-00966312.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA;
XX WPI; 2003-247253/24.
XX Detecting nucleic acid having two portions, by providing nanoparticles
XX having oligonucleotides attached to it, contacting nucleic acid and
XX nanoparticles to allow hybridization, and observing detectable change,
XX useful in forensics.
XX Example 18; Page 44; 130pp; English.
XX This invention relates to a novel method for detecting nucleic acid
XX sequences having two portions. The method involves providing
XX nanoparticles having oligonucleotides attached to them, which has a
XX sequence complementary to sequence of two portions of nucleic acid,
XX contacting nucleic acid and nanoparticles, to allow hybridisation of
XX oligonucleotides with two or more portions of nucleic acid, and observing
XX a detectable change brought about by hybridisation. The method of the
XX invention and the aggregate probes are useful for detecting two or more
XX nucleic acids (from a biological source) having at least two portions,
XX such as viral RNA or DNA, bacterial or fungal DNA, a gene associated with
XX a disease, synthetic, or structurally- modified natural or synthetic RNA
XX or DNA, or a product of a polymerase chain reaction amplification.
XX Nanoparticles and nanoparticle- oligonucleotide conjugates of the
XX invention are useful for nanofabrication, and for separating a selected
XX nucleic acid having two portions from other nucleic acids. The method of
XX the invention is useful in forensics, DNA sequencing, for paternity
XX testing, cell line authentication, and monitoring gene therapy.
XX Diagnostic assays employing the nanoparticle-oligonucleotide conjugates
XX of the invention improve the sensitivity of the nucleic acid detection
XX assay. The present sequence represents a thiol modified oligonucleotide
XX sequence used to demonstrate the method of the invention

CC oligonucleotide sequence used to demonstrate the method of the invention
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 472
 ACD27190
 ID ACD27190 standard; DNA; 20 BP.
 XX
 AC ACD27190;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method associated #54.
 XX
 KW Nanoparticle; ss; nucleic acid detection; DNA sequencing.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /*mod_base= OTHER
 FT /*note= "OTHER= Thiol modified" "
 XX
 PN US2002182613-A1.
 XX
 PD 05-DEC-2002.
 XX
 PF 12-OCT-2001; 2001US-00976971.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-596265/56.
 XX
 PT Detection of nucleic acid for, e.g. research and analytical laboratories
 PT in deoxyribonucleic acid sequencing, involves contacting nucleic acid
 PT with nanoparticles having oligonucleotides.
 XX
 PS Example 18; Page 43; 107pp; English.
 XX
 CC This invention relates to a novel method for detecting a nucleic acid by
 CC contacting nucleic acid with at least two types of nanoparticles having
 CC oligonucleotides, allowing hybridisation of the oligonucleotides on the
 CC nanoparticles, and observing a detectable change. The oligonucleotides on
 CC each nanoparticle have a sequence complementary to its respective portion
 CC of the sequence of the nucleic acid. The method of the invention may be
 CC used for the detection of a nucleic acid used in, e.g. research and
 CC analytical laboratories in DNA sequencing, in the field to detect the
 CC presence of specific pathogens, in the doctor's office for quick
 CC identification of an infection to assist in prescribing a drug for
 CC treatment, and in homes and health centres for inexpensive first-line
 CC screening. The inventive method of detecting nucleic acids based on
 CC observing a colour change with the naked eye are cheap, fast, simple,
 CC robust (the reagents are stable), do not require specialised or expensive

CC equipment, and little or no instrumentation is required. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 473
 ACD27060
 ID ACD27060 standard; DNA; 20 BP.
 XX
 AC ACD27060;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method oligonucleotide #54.
 XX
 KW Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /*mod_base= OTHER
 FT /*note= "OTHER= Thiol modified" "
 XX
 PN US2003044805-A1.
 XX
 PD 06-MAR-2003.
 XX
 PF 15-OCT-2001; 2001US-00981344.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-521746/49.
 XX
 PT Detection of nucleic acid having -2 portions used to prepare biomaterials
 PT and in nanofabrication methods, comprises providing nanoparticles,
 PT contacting nucleic acid and nanoparticles, and observing change.
 XX
 PS Example 18; Page 44; 130pp; English.
 XX
 CC This invention relates to a novel method for detecting nucleic acids. The
 CC method comprises providing nanoparticles with oligonucleotides attached
 CC to them, which have a sequence complementary to a sequence of two
 CC portions of nucleic acid, contacting the nucleic acid and nanoparticles
 CC to allow hybridisation of the oligonucleotides with two or more portions
 CC of the nucleic acid, and observing a detectable change brought about by
 CC the hybridisation. The nucleic acid to be detected must have at least two
 CC portions and the distances between these are chosen so that when the
 CC nanoparticle-oligonucleotide conjugate binds the target sequence a
 CC detectable change occurs. The method of the invention is useful for
 CC detecting two or more nucleic acids (from a biological source) having at
 CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene

CC associated with a disease, synthetic, or structurally- modified natural
 CC or synthetic RNA or DNA, or a product of a polymerase chain reaction
 CC amplification. Nanoparticle-oligonucleotide conjugates of the invention
 CC are useful for preparing a nanoprobe conjugate for detecting an analyte,
 CC and for detecting a nucleic acid bound to an electrode surface.
 CC Nanoparticles and nanoparticle conjugates of the invention are useful for
 CC nanofabrication and for separating a selected nucleic acid having two
 CC portions from other nucleic acids. Diagnostic assays employing
 CC nanoparticle-oligonucleotide conjugates improve the sensitivity of
 CC nucleic acid detection methods and can be used to detect nucleic acids
 CC that are present in only small amounts in a sample. The invention also
 CC provides highly desirable nanoparticle-oligonucleotide conjugates. These
 CC conjugates are stable with tailored hybridisation abilities. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 474
 ACH00064
 ID ACH00064 standard; DNA; 20 BP.
 XX
 AC ACH00064;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method oligonucleotide #54.
 XX
 KW Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Thiol modified" "
 XX
 PN US2003049631-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 10-OCT-2001; 2001US-00974500.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-634854/60.
 XX
 XX Detection of nucleic acid having at least two portions, by contacting
 PT nucleic acid and nanoparticles under conditions, which allows
 PT hybridization of oligonucleotides on nanoparticles with at least two
 PT portions of nucleic acid.
 XX
 PS Example 18; Page 44; 108pp; English.

XX This invention relates to a novel method for detecting nucleic acids. The
 CC method comprises providing nanoparticles with oligonucleotides attached
 CC to them, which have a sequence complementary to a sequence of two
 CC portions of nucleic acid, contacting the nucleic acid and nanoparticles
 CC to allow hybridisation of the oligonucleotides with two or more portions
 CC of the nucleic acid, and observing a detectable change brought about by
 CC the hybridisation. The nucleic acid to be detected must have at least two
 CC portions and the distances between these are chosen so that when the
 CC nanoparticle-oligonucleotide conjugate binds the target sequence a
 CC detectable change occurs. The method of the invention is useful for
 CC detecting two or more nucleic acids (from a biological source) having at
 CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene
 CC associated with a disease, synthetic, or structurally- modified natural
 CC or synthetic RNA or DNA, or a product of a polymerase chain reaction
 CC amplification. Nanoparticle-oligonucleotide conjugates of the invention
 CC are useful for preparing a nanoprobe conjugate for detecting an analyte,
 CC and for detecting a nucleic acid bound to an electrode surface.
 CC Nanoparticles and nanoparticle conjugates of the invention are useful for
 CC nanofabrication and for separating a selected nucleic acid having two
 CC portions from other nucleic acids. Diagnostic assays employing
 CC nanoparticle-oligonucleotide conjugates improve the sensitivity of
 CC nucleic acid detection methods and can be used to detect nucleic acids
 CC that are present in only small amounts in a sample. The invention also
 CC provides highly desirable nanoparticle-oligonucleotide conjugates. These
 CC conjugates are stable with tailored hybridisation abilities. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 475
 ACD99851
 ID ACD99851 standard; DNA; 20 BP.
 XX
 AC ACD99851;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #537.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 XX Krieg AM, Berg DJ;
 PI WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,

PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 XX disease by administering an immunostimulatory nucleic acid.
 PS Disclosure; Page 23; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||

RESULT 476
 ACD99847/c
 ID ACD99847 standard; DNA; 20 BP.
 XX
 AC ACD99847;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #533.
 XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 PI WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 23; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||

RESULT 477
 ACD99532/c
 ID ACD99532 standard; DNA; 20 BP.
 XX
 AC ACD99532;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #218.
 XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 PI WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 14; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||

RESULT 478
 ADA14838
 ID ADA14838 standard; DNA; 20 BP.
 XX
 AC ADA14838;
 XX

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||

RESULT 477
 ACD99532/c
 ID ACD99532 standard; DNA; 20 BP.
 XX
 AC ACD99532;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #218.
 XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 PI WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 14; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||

RESULT 478
 ADA14838
 ID ADA14838 standard; DNA; 20 BP.
 XX
 AC ADA14838;
 XX

XX 06-NOV-2003 (first entry)

XX Hairpin target sequence, #2, used in an example of the invention.

DE Hairpin sensor; hairpin loop; complementary probe; inverse repeat arm;

KW quenchable fluorescing agent; microarray; semiconductor; nanocrystal;

KW rhodamine B-labelled dye; detection; gold support; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc_binding 1..20

FT /*tag= a

FT /bound_moiety= "Hairpin oligonucleotide #2"

FT /note= "Forms a double-stranded region with the hairpin

FT oligonucleotide shown in examples 3, 4 and 5"

XX US2003013109-A1.

XX 16-JAN-2003.

XX 21-JUN-2002; 2002US-00176055.

XX 21-JUN-2001; 2001US-0299460P.

XX (BALL/) BALLINGER C T.

PA (LOCA/) LOCASCIO M.

PA (LAND/) LANDRY D P.

XX Ballinger CT, Locascio M, Landry DP;

XX WPI; 2003-596312/56.

XX Hairpin sensor useful for detecting a target nucleotide sequence in a

PT sample, comprises a hairpin loop assembly including a complementary probe

PT and a quenchable fluorescing agent.

XX Example 3; Page 11; 16pp; English.

XX The invention discloses a hairpin sensor comprising a hairpin loop

CC assembly including a complementary probe positioned between a first

CC inverse repeat arm and a second inverse repeat arm, and a quenchable

CC fluorescing agent joined, directly or indirectly, to the end of the

CC second inverse repeat arm of the hairpin loop assembly opposing the

CC complementary probe. Also claimed is a microarray comprising the hairpin

CC sensor, where the end of the first inverse repeat arm opposite the

CC complementary probe is bound, directly or indirectly, to a support, a kit

CC for detecting a target nucleotide sequence in a sample comprising the

CC hairpin sensor, and a support, and a hairpin sensor system, in which the

CC particle is conductive or semi-conductive, including at least one of the

CC above hairpin sensor assemblies. The hairpin sensor further comprises a

CC functional group joined to the end of the first inverse repeat arm

CC opposite the complementary probe, or first spacer opposite the first

CC inverse repeat arm, the functional group selected from amino, carboxyl,

CC thiol and hydroxyl. Further, the sensor comprises a ligand positioned

CC between the second inverse repeat arm and the quenchable fluorescing

CC agent, where the ligand is selected from mercapto, hydroxyl, amino,

CC nitrile and carboxyl, carboxylic acid, organic acid and amino acid. The

CC second spacer is positioned between the second inverse repeat arm and the

CC quenchable fluorescing agent which comprises a semiconductor nanocrystal

CC or rhodamine B-labelled dye. Within the microarray the support is capable

CC of accepting a charge. At least one hairpin sensor comprises two or more

CC hairpin sensors. The two or more hairpin sensors include complementary

CC probes that are the same or different and respective quenchable

CC fluorescing agents that are the same or different. The two or more

CC hairpin sensors are arranged in a spatially-defined pattern. The sensor

CC and system are useful for detecting a target nucleotide sequence in a

CC sample. Further, the method involves identifying the target nucleotide

CC sequence by the location of the complementary probe to which the target

CC nucleotide sequence binds. The two or more hairpin sensors include

CC complementary probes or quenchable fluorescing agents, that are

CC different. The sequence presented is the hairpin oligonucleotide target

CC sequence, #2, used in an example of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 20; DB 1; Length 20;

XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;

XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 479

ADA06159

ID ADA06159 standard; DNA; 20 BP.

XX ADA06159;

XX 06-NOV-2003 (first entry)

XX Nanoparticle labelled oligonucleotides, spacer DNA #2.

DE ss; nanoparticle; colloidal gold; semiconductor; nanomaterial;

KW nanostructure; viral disease; human immunodeficiency virus infection;

KW hepatitis virus infection; herpes virus infection;

KW cytomegalovirus virus infection; Epstein-Barr virus; bacterial disease;

KW sexually transmitted disease; inherited disorders; paternity testing;

KW cell line authentication; gene therapy.

XX Synthetic.

XX US2003068622-A1.

XX 10-APR-2003.

XX 12-OCT-2001; 2001US-00976863.

XX 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-05012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

PI Taton TA;

XX WPI; 2003-576420/54.

XX Detecting nucleic acids having at least 2 portions comprises use of

PT nanoparticles which have oligonucleotides attached to them that are

PT complementary to portions of the target nucleic acid sequence.

XX Example 18; Page 44; 130pp; English.

XX The invention relates to detecting a nucleic acid (NA) having at least 2

CC portions comprising providing a type of nanoparticles (NP, e.g. colloidal

CC gold) having oligonucleotides (O) attached (where (O) on each NP has a

CC sequence complementary to sequence of at least two portions of NA),

CC contacting NA and NP to allow hybridisation of (O) on NP with 2 or more

CC portions of NA, and observing a detectable change brought about by

CC hybridization of (O) on NP with NA. Also included are aggregate probes,

CC core probes, substrate having NP attached to it, a metallic or

CC semiconductor NP having (O) attached to it, nanomaterial/nanostructures

CC comprising nanoparticles and methods of nanofabrication utilising

CC nanoparticles and satellite probes. The methods, probes nucleic acids,

CC nanoparticles and oligonucleotides are useful for separating a selected

CC nucleic acid having at least two portions, from other nucleic acids, and

CC for detecting nucleic acids having at least two portions, for detecting

CC NA having at least two portions. The method is useful for detecting any

type of nucleic acids which may be used for diagnosis of disease and in sequencing of nucleic acids. Preferably, the method is useful for detecting nucleic acids for diagnosis and/or monitoring of viral diseases (human immunodeficiency virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr virus). Bacterial diseases, sexually transmitted diseases, inherited disorders, in forensics, in DNA sequencing, for paternity testing, for cell line authentication, for monitoring gene therapy, etc. The method is useful in research and analytical laboratories in DNA sequencing, in the field to detect the presence of specific pathogens, etc. Detecting nucleic acids based on observing a colour change with the naked eye is cheap, fast, simple and robust, and do not require specialised expensive equipment. The present sequence is a spacer oligonucleotide used to illustrate the method of the invention.

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 480

ACD26995
ID ACD26995 standard; DNA; 20 BP.

XX ACD26995;

XX 15-OCT-2003 (first entry)

XX Nanotechnology nucleic acid detection method oligonucleotide #54.

XX Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= Thiol modified" "

XX US2003049630-A1.

XX 13-MAR-2003.

XX 20-SEP-2001; 2001US-00957318.

XX 29-JUL-1996; 96US-0031809P.

XX 21-JUL-1997; 97WO-US012783.

XX 23-JAN-1999; 99US-00240755.

XX 25-JUN-1999; 99US-00344667.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

PI Taton TA;

XX WPI; 2003-615795/58.

XX Detecting nucleic acid having two portions, by providing nanoparticles having oligonucleotides attached to it, contacting nucleic acid and nanoparticles to allow hybridization, and observing detectable change.

PS Example 18; Page 43; 129pp; English.

XX This invention relates to a novel method for detecting nucleic acids. The

method comprises providing nanoparticles with oligonucleotides attached to them, which have a sequence complementary to a sequence of two portions of nucleic acid, contacting the nucleic acid and nanoparticles to allow hybridisation of the oligonucleotides with two or more portions of the nucleic acid, and observing a detectable change brought about by the hybridisation. The nucleic acid to be detected must have at least two portions and the distances between these are chosen so that when the nanoparticle-oligonucleotide conjugate binds the target sequence a detectable change occurs. The method of the invention is useful for detecting two or more nucleic acids (from a biological source) having at least two portions, such as viral RNA, bacterial or fungal DNA, a gene or synthetic RNA or DNA, or a product of a polymerase chain reaction amplification. Nanoparticle-oligonucleotide conjugates of the invention are useful for preparing a nanoprobe conjugate for detecting an analyte, and for detecting a nucleic acid bound to an electrode surface. Nanoparticles and nanoparticle conjugates of the invention are useful for nanofabrication and for separating a selected nucleic acid having two portions from other nucleic acids. Diagnostic assays employing nanoparticle-oligonucleotide conjugates improve the sensitivity of nucleic acid detection methods and can be used to detect nucleic acids that are present in only small amounts in a sample. The present sequence represents a thiol modified oligonucleotide sequence used to demonstrate the method of the invention

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 481

ADB36933

ID ADB36933 standard; DNA; 20 BP.

XX ADB36933;

XX 04-DEC-2003 (first entry)

XX Immunostimulatory nucleic acid #547.

XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.

XX Synthetic.

XX US2003087848-A1.

XX 08-MAY-2003.

XX 02-FEB-2001; 2001US-00776479.

XX 03-FEB-2000; 2000US-0179991P.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

XX (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2003-657977/62.

XX Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.

PS Disclosure; Page 13; 221pp; English.

XX The invention relates to a method of treating or preventing allergy or


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PR 08-MAY-2001; 2001JP-00137858.
XX (TAKA-) TAKARA BIO KK.
PA (KOKU-) KOKURITSU GAN CENT SOCHO.
PA (IYAK-) IYAKUHIN FUKUSAYO HIGAI KYUSAI KENKYU SH.
XX
DR WPI; 2003-460878/44.
XX
CC Amplification of DNA maintaining genes and copy number of the sequence on
PT a genome, and their ratios in the resultant DNA fragment.
XX
PS Example 5; SEQ ID NO 68; 33pp; Japanese.
XX
CC The invention relates to a method for the amplification of DNA that
CC maintains genes and copy number of the sequence. This method is useful
CC for easy and operable amplification of DNA. The method was carried out by
CC fragmentation genomic DNA, preparation of blunt end of the fragmented
CC DNA, ligation of an adapter to the bluntend DNA, PCR of the ligated DNA in
CC 2 steps, and confirmation of the amplified APC gene. The current sequence
CC represents a PCR primer used in an example from the invention.
XX
SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1745 CCCTCCCTGTCGTCGTACCC 1764
Db 1 CCCTCCCTGTCGTCGTACCC 20
RESULT 485
ADE52461/c
ID ADE52461 standard; DNA; 20 BP.
XX
AC ADE52461;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stem cell factor (SCF) related DNA #32.
XX
KW Stem cell factor; SCF; haematopoietic activity; infertility;
KW intestinal damage; myeloproliferative disorder; leucopenia;
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
KW military tuberculosis; haematopoietic progenitor cell; ss.
XX
OS Synthetic.
XX
XX US2002031491-A1.
XX
XX 14-MAR-2002.
XX
PF 31-DEC-1998; 98US-00224683.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
PA (ZSEB/) ZSEB K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX

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DR WPI; 2003-851459/79.
XX
PT New non-natural stem cell factor, useful for treating e.g. leucopenia or
PT immune deficiency, also related nucleic acid and antibodies.
XX
XX Disclosure; SEQ ID NO 33; 217pp; English.
XX
CC The invention relates to stem cell factor (SCF) polypeptides with
CC haematopoietic activity and the polynucleotides encoding them. The
CC polypeptides are used for treating infertility, intestinal damage,
CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
CC for improving engraftment of bone marrow transplants, for enhancing bone
CC marrow recovery after radiotherapy or chemotherapy and in treatment of
CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are
CC also used to expand haematopoietic progenitor cells for transplantation
CC and to prepare such cells for transfection with a gene. The SCF
CC polynucleotides can be used for recombinant expression of the
CC polypeptides and also as probes for mapping of the SCF gene, for
CC identifying SCF-related diseases and as a marker for neighbouring genes.
CC Antibodies raised against the polypeptides are useful in diagnosis and to
CC remove SCF from blood. This sequence represents SCF related DNA of the
CC invention.
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAAA 1
RESULT 486
ADF09421
ID ADF09421 standard; DNA; 20 BP.
XX
AC ADF09421;
XX
DT 12-FEB-2004 (first entry)
XX
DE Linking oligonucleotide #55.
XX
KW Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
XX US2003148282-A1.
XX
XX 07-AUG-2003.
XX
PF 12-OCT-2001; 2001US-00976968.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA;
XX
XX WPI; 2003-897536/B2.
XX
PT Detection of nucleic acid having at least two portions comprises
PT contacting the nucleic acid and nanoparticles under conditions to allow
PT hybridization of the oligonucleotides, and observing detectable change

```



```

PT brought by hybridization.
XX
PS Example 18; SEQ ID NO 55; 129pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridization of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 487
ADF65655
ID ADF65655 standard; DNA; 20 BP.
XX
AC ADF65655;
XX
XX 12-FEB-2004 (first entry)
XX
DE Nanotechnology nucleic acid detection method associated #54.
XX
KW Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
XX US2002146720-A1.
XX
PD 10-OCT-2002.
XX
PF 20-SEP-2001; 2001US-00961949.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghamian R;
PI Taton TA;
XX
DR WPI; 2003-174167/17.
XX
PT Detecting nucleic acid having two portions, by providing nanoparticles
PT having oligonucleotides attached to it, contacting nucleic acid and
PT nanoparticles to allow hybridization, and observing detectable change.
XX
XX Example 18; SEQ ID NO 55; 130pp; English.
PS
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 488
AAD64709
ID AAD64709 standard; DNA; 20 BP.
XX
XX AAD64709;
XX
XX 12-FEB-2004 (first entry)
XX
DE Coadsorbed diluent thiol modified oligonucleotide.
XX
KW Nanoparticle; ss.
XX
OS Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1 /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Labelled with thiol group"
XX
PN US2003180783-A1.
XX
XX 25-SEP-2003.
XX
XX 09-APR-2003; 2003US-00410324.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-JUN-2000; 2000US-00603830.
PR 20-SEP-2001; 2001US-00961949.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghamian R;
PI Taton TA;
XX
XX WPI; 2003-863931/80.
XX
PT Detection of nucleic acid with two portions comprises providing
PT nanoparticles having oligonucleotides, contacting nucleic acid and
PT nanoparticles to allow hybridization of oligonucleotides on
PT nanoparticles, and observing detectable change.
XX
XX Example 18; SEQ ID NO 55; Opp; English.
PS
CC The present invention relates to methods of detecting nucleic acids
CC whether natural or synthetic and whether modified or unmodified. The
CC invention also relates to materials for detecting nucleic acids and to
CC methods of separating a selected nucleic acid from other nucleic acids.
CC The invention is useful for detecting nucleic acid having at least 2
CC portions. The present sequence is an oligonucleotide used to synthesise
CC and purify fluorescein labelled oligonucleotides
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ

```

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
| | | | | | | | | | | | | | | | | |
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 489
ADF65590
ID ADF65590 standard; DNA; 20 BP.
XX
AC ADF65590;
XX
DT 12-FEB-2004 (first entry)
XX
DE Nanotechnology nucleic acid detection method associated #54.
XX
KW Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
PN US2003124528-A1.
XX
PD 03-JUL-2003.
XX
PF 12-OCT-2001; 2001US-00976601.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.

XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA;
XX
DR WPI; 2003-810979/76.
XX
XX
PT Detection of nucleic acid useful for, e.g. research and analytical
PT laboratories in deoxyribonucleic acid sequencing, comprises contacting
PT nucleic acid with at least two types of nanoparticles attached with
PT oligonucleotides.

XX
PS Example 18; SEQ ID NO 55; 130pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridization of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.

XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
| | | | | | | | | | | | | | | | | |
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 490
ADH59608/c
ID ADH59608 standard; DNA; 20 BP.
XX
AC ADH59608;
XX
DT 25-MAR-2004 (first entry)
XX
DE Non-nucleotide probe of the invention #12.
XX
DE non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;
KW probe.
XX
OS Synthetic.
XX
PN WO2003027328-A2.
XX
PD 03-APR-2003.
XX
PF 24-SEP-2002; 2002WO-US030573.
XX
PR 24-SEP-2001; 2001US-0324499P.
XX
PA (BOST-) BOSTON PROBES INC.
PA (DAKO-) DAKOCYTOMATION DENMARK AS.

XX
PI Kirtsen NV, Hyldeg-Nielsen JJ, Williams BF;
XX
DR WPI; 2003-421160/39.
XX

XX
PT Non-nucleotide probe for suppressing binding of detectable nucleic acid
PT probes to undesired sequences, has aggregate nucleobase sequence
PT homologous to randomly distributed repeat sequence of genomic nucleic
XX acid.

PS Claim 10; SEQ ID NO 14; 103pp; English.

XX
CC The present sequence represents a non-nucleotide probe. The probe is
CC useful for suppressing the binding of one or more detectable nucleic acid
CC probes, that are greater than 100 base pairs and that have been derived
CC from genomic nucleic acid, to one or more undesired sequences in an assay
CC for determining target genomic nucleic acid of a sample. The method
CC comprises contacting the sample with the mixture of probes (preferably
CC comprising 5-50 probes), contacting the sample with the one or more
CC detectable nucleic acid probes, and determining the hybridization of the
CC nucleic acid of the sample by determining the hybridization of the one or
CC more detectable nucleic acid probes to the target genomic nucleic acid of
CC the sample. The genomic nucleic acid is contained in a fixed tissue or a
CC cell, and the sample is metaphase spreads, interphase nucleic or nucleic
CC found in paraffin embedded tissue material or frozen tissue sections. The
CC probe is also useful in comparing a sample of genomic nucleic acid with
CC that of a control sample using a genomic nucleic acid reference array.
CC The method comprises treating a sample of genomic nucleic acid and
CC control genomic nucleic acid, which are differentially labelled, the
CC array or both the sample and control genomic nucleic acid and the array
CC with the mixture of the probe under suitable hybridization conditions,
CC contacting the array with treated mixture of sample and control genomic
CC nucleic acid under suitable hybridization conditions, and comparing the
CC intensities of the signals from the differential labels of the array to
CC that caused by hybridization of the probes to genomic nucleic acid, thus
CC determining one or more variations in copy numbers of sequences in the
CC sample as compared with the relative copy numbers of substantially
CC identical sequences in the control. The hybridization of the genomic
CC array is determined using an intercalating dye or a detectable antibody,
CC or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.
CC The sample of genomic nucleic acid to be tested and the reference of
CC nucleic acid are labelled with detectable moiety such that hybridization
CC of the genomic array is determined by determining the presence, absence,
CC amount or location of the detectable label on the one or more genomic
CC arrays. The genomic array comprises nucleic acid that is prepared from
CC Bacterial Artificial Chromosome (BAC) clones. The present sequence
XX represents a non-nucleotide probe of the invention.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 491
 ADH59620
 ID ADH59620 standard; DNA; 20 BP.
 XX AC ADH59620;
 XX
 XX 25-MAR-2004 (first entry)
 XX
 XX Non-nucleotide probe of the invention #24.
 XX
 XX non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;
 KW probe.
 XX
 XX Synthetic.
 OS
 XX WO2003027328-A2.
 XX
 XX 03-APR-2003.
 XX
 XX 24-SEP-2002; 2002WO-US030573.
 XX
 XX 24-SEP-2001; 2001US-0324499P.
 XX
 XX (BOST-) BOSTON PROBES INC.
 PA (DAKO-) DAKOCYTOMATION DENMARK AS.
 XX
 XX Kirteen NV, Hyldig-Nielsen JJ, Williams BF;
 PI
 XX WPI; 2003-421160/39.
 XX
 XX
 XX Non-nucleotide probe for suppressing binding of detectable nucleic acid
 PT probes to undesired sequences, has aggregate nucleobase sequence
 PT homologous to randomly distributed repeat sequence of genomic nucleic
 PT acid.
 XX
 XX Claim 10; SEQ ID NO 26; 103pp; English.
 XX
 XX The present sequence represents a non-nucleotide probe. The probe is
 CC useful for suppressing the binding of one or more detectable nucleic acid
 CC probes, that are greater than 100 base pairs and that have been derived
 CC from genomic nucleic acid, to one or more undesired sequences in an assay
 CC for determining target genomic nucleic acid of a sample. The method
 CC comprises contacting the sample with the mixture of probes (preferably
 CC comprising 5-50 probes), contacting the sample with the one or more
 CC detectable nucleic acid probes, and determining the target genomic
 CC nucleic acid of the sample by determining the hybridization of the one or
 CC more detectable nucleic acid probes to the target genomic nucleic acid of
 CC the sample. The genomic nucleic acid is contained in a fixed tissue or a
 CC cell, and the sample is metaphase spreads, interphase nucleic or nucleic
 CC found in paraffin embedded tissue material or frozen tissue sections. The
 CC probe is also useful in comparing a sample of genomic nucleic acid with
 CC that of a control sample using a genomic nucleic acid reference array.
 CC The method comprises treating a sample of genomic nucleic acid and
 CC control genomic nucleic acid, which are differentially labelled, the
 CC array or both the sample and control genomic nucleic acid and the array
 CC with the mixture of the probe under suitable hybridization conditions,
 CC contacting the array with treated mixture of sample and control genomic
 CC nucleic acid under suitable hybridization conditions, and comparing the
 CC intensities of the signals from the differential labels of the array to
 CC that caused by hybridization of the probes to genomic nucleic acid, thus
 CC determining one or more variations in copy numbers of sequences in the
 CC sample as compared with the relative copy numbers of substantially

CC identical sequences in the control. The hybridization of the genomic
 CC array is determined using an intercalating dye or a detectable antibody,
 CC or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.
 CC The sample of genomic nucleic acid to be tested and the reference of
 CC nucleic acid are labelled with detectable moiety such that hybridization
 CC of the genomic array is determined by determining the presence, absence,
 CC amount or location of the detectable label on the one or more genomic
 CC arrays. The genomic array comprises nucleic acid that is prepared from
 CC Bacterial Artificial Chromosome (BAC) clones. The present sequence
 CC represents a non-nucleotide probe of the invention.
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728

DB 1 AAAAAAAAAAAAAAAAAA 20

RESULT 492

ABZ88267

ID ABZ88267 standard; DNA; 20 BP.

XX AC ABZ88267;

XX

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

XX WO200285308-A2.

XX

XX 31-OCT-2002.

XX

XX 23-APR-2002; 2002WO-US013135.

XX

XX 24-APR-2001; 2001US-0286137P.

XX

XX (EPTG-) EPIGENESIS PHARM INC.

XX

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

XX WPI; 2003-229219/22.

XX

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX

XX Disclosure; SEQ ID NO 3509; 872pp; English.

XX

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 493

ABZ88565
 ID ABZ88565 standard; DNA; 20 BP.

AC ABZ88565;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3807; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 494

ABZ88619
 ID ABZ88619 standard; DNA; 20 BP.

XX AC ABZ88619;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3861; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 495

ABZ89705
 ID ABZ89705 standard; DNA; 20 BP.

XX ABZ89705;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4947; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 496

ABZ88816

ID ABZ88816 standard; DNA; 20 BP.

XX ABZ88816;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4058; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 497

ABZ88881
 ID ABZ88881 standard; DNA; 20 BP.

XX
 AC ABZ88881;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 4123; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cyostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 498

ABZ89706
 ID ABZ89706 standard; DNA; 20 BP.

XX
 AC ABZ89706;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 4948; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cyostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 499
ABZ88620
ID ABZ88620 standard; DNA; 20 BP.
XX
AC ABZ88620;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Disclosure; SEQ ID NO 3862; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 500
ABZ88880
ID ABZ88880 standard; DNA; 20 BP.
XX
AC ABZ88880;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Disclosure; SEQ ID NO 4122; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 501

ABZ89179

ID ABZ89179 standard; DNA; 20 BP.

XX AC

ABZ89179;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX XX Miller S, Tang L, Shahabuddin S;

XX XX WPI; 2003-229219/22.

XX XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX XX Disclosure; SEQ ID NO 4421; 872pp; English.

XX XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 502

ABZ88814

ID ABZ88814 standard; DNA; 20 BP.

XX AC

ABZ88814;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX XX Miller S, Tang L, Shahabuddin S;

XX XX WPI; 2003-229219/22.

XX XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX XX Disclosure; SEQ ID NO 4056; 872pp; English.

XX XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 503
 ABZ89241
 ID ABZ89241 standard; DNA; 20 BP.
 XX
 AC ABZ89241;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4483; 872pp; English.
 PS
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 504
 ABZ90650
 ID ABZ90650 standard; DNA; 20 BP.
 XX
 AC ABZ90650;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 5892; 872pp; English.
 PS
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 505
 ABZ88815
 ID ABZ88815 standard; DNA; 20 BP.
 AC ABZ88815;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 4057; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 506
 ABZ85311/c
 ID ABZ85311 standard; DNA; 20 BP.
 AC ABZ85311;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 DE Human oligonucleotide sequence.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Claim 15; SEQ ID NO 553; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 507
 ABZ85435/C
 ID ABZ85435 standard; DNA; 20 BP.
 XX
 AC ABZ85435;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-229219/22.
 DR

XX
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 PT

XX
 PS Claim 15; SEQ ID NO 677; 872pp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 508
 ABZ88817
 ID ABZ88817 standard; DNA; 20 BP.
 XX
 AC ABZ88817;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-229219/22.
 DR

XX
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 PT

XX
 PS Disclosure; SEQ ID NO 4059; 872pp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 509

ABZ88939

ID ABZ88939 standard; DNA; 20 BP.

XX AC ABZ88939;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4181; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 510

ABZ89302

ID ABZ89302 standard; DNA; 20 BP.

XX AC ABZ89302;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4544; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 511

ABZ88566
 ID ABZ88566 standard; DNA; 20 BP.

XX AC ABZ88566;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EP1G-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 3808; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 512

ABZ89086

ID ABZ89086 standard; DNA; 20 BP.

XX AC ABZ89086;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EP1G-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4328; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 513

ABZ85533
 ID ABZ85533 standard; DNA; 20 BP.

XX AC ABZ85533;

XX XX 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Claim 15; SEQ ID NO 775; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 514

ABZ89015

ID ABZ89015 standard; DNA; 20 BP.

XX AC ABZ89015;

XX XX 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4257; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 515
 ABZ89240
 ID ABZ89240 standard; DNA; 20 BP.

XX
 AC ABZ89240;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4482; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 Db 1 CTAATAAAAAAAAAAAAAAAAAA 20

RESULT 516
 ABZ89441

ID ABZ89441 standard; DNA; 20 BP.

XX
 AC ABZ89441;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4683; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 517

ABZ89016

ID ABZ89016 standard; DNA; 20 BP.

XX AC ABZ89016;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4258; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 518

ABZ89120

ID ABZ89120 standard; DNA; 20 BP.

XX AC ABZ89120;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4362; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 519

ABZ89704

ID ABZ89704 standard; DNA; 20 BP.

XX

AC ABZ89704;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN W0200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX

PS Disclosure; SEQ ID NO 4946; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 520

ACD27320

ID ACD27320 standard; DNA; 20 BP.

XX

AC ACD27320;

XX

DT 15-OCT-2003 (first entry)

XX

DE Nanotechnology nucleic acid detection method associated #54.

XX

KW Nanotechnology; ss; nucleic acid detection; nanoparticle;

KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;

KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;

KW sexually transmitted disease; inherited disorder; forensic;

KW paternity testing; cell line authentication.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= Thiol modified" "

XX US2002155461-A1.

XX

XX 24-OCT-2002.

XX

XX 12-OCT-2001; 2001US-00976378.

XX

XX 29-JUL-1996; 96US-0031809P.

XX

XX 21-JUL-1997; 97WO-US012783.

XX

XX 29-JAN-1999; 99US-00240755.

XX

XX 25-JUN-1999; 99US-00344667.

XX

XX 26-APR-2000; 2000US-0200161P.

XX

XX 26-JUN-2000; 2000US-00603830.

XX

XX (NANO-) NANOSPHERE INC.

XX

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

XX Taton TA;

XX

XX WPI; 2003-228115/22.

XX

CC Detecting nucleic acids having 2 portions e.g. for detecting disease,
 CC comprises use of nanoparticles which have oligonucleotides attached to
 CC them that are complementary to portions of the nucleic acid sequence.
 XX Example 18; Page 44; 130pp; English.
 XX This invention relates to a novel method for detecting a nucleic acid

CC having 2 portions. The method comprises providing nanoparticles having
 CC oligonucleotides attached, where the oligonucleotide on each nanoparticle
 CC has a sequence complementary to a sequence of 2 portions of nucleic acid.
 CC The nucleic acid and nanoparticle are contacted to allow hybridisation of
 CC the oligonucleotide on the nanoparticle with two or more portions of
 CC nucleic acid and observing a detectable change brought about by the
 CC hybridisation. The method of the invention is useful for separating a
 CC selected nucleic acid having 2 portions, from other nucleic acids, and
 CC for detecting nucleic acids having 2 portions. The method of the
 CC invention is useful for detecting any type of nucleic acids which may be
 CC used for diagnosis of disease and in sequencing of nucleic acids.
 CC Preferably, the method is useful for detecting nucleic acids for
 CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
 CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
 CC virus), bacterial diseases, sexually transmitted diseases, inherited
 CC disorders, in forensics, in DNA sequencing, for paternity testing, for
 CC cell line authentication, for monitoring gene therapy, etc. This method
 CC involves detecting nucleic acids based on observing a colour change with
 CC the naked eye so is cheap, fast, simple and robust, and does not require
 CC specialised expensive equipment. The present sequence represents a thiol
 CC modified oligonucleotide sequence used to demonstrate the method of the
 CC invention

XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 521
 ACC58867/c
 ID ACC58867 standard; DNA; 20 BP.
 XX
 AC ACC58867;
 XX
 DT 08-SEP-2003' (first entry)
 XX
 DE Doubly labelled DNA probe.
 XX
 KW Probe; nucleic acid detection; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003043402-A2.
 XX
 PD 30-MAY-2003.
 XX
 XX 21-OCT-2002; 2002WO-US033699.
 XX
 PR 19-OCT-2001; 2001US-0336432P.
 XX
 PA (PROL-) PROLIGO LLC.
 XX
 PI Bruce I, Davies M, Wolter A;
 XX
 DR WPI; 2003-505122/47.
 XX
 FT Detection or quantification of nucleic acid analyte, by hybridizing a
 PT nucleic acid probe having non-identical covalently attached dyes, with
 PT nucleic acid analyte, and measuring change in fluorescence of the probes.
 XX
 PS Example 9; Page 32; 110pp; English.

XX The present sequence is an example of nucleic acid probes of the
 CC invention. The probe may be doubly labelled with non-identical covalently
 CC attached dyes, e.g. the fluorescent intercalator ethidium, which serves
 CC as the detector dye and the fluorescent dye fluorescein, which serves as
 CC the donor dye of a fluorescent resonance energy transfer (FRET) system. A

CC bifunctional linker was used to attach the dyes to the oligonucleotide.
 CC The probe generates a fluorescent signal upon hybridisation to a
 CC complementary nucleic acid based on the interaction of the intercalator
 CC with the formed double-stranded DNA. Nucleic acid probes of the invention
 CC can be used in homogeneous assays, real-time PCR monitoring,
 CC transcription assays, expression analysis on nucleic acid microarrays and
 CC other microarray applications such as genotyping

XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 522
 ABZ22916/c
 ID ABZ22916 standard; DNA; 20 BP.
 XX
 AC ABZ22916;
 XX
 DT 08-APR-2003 (first entry)
 XX
 DE Phosphorothioate 20-mer oligonucleotide #1.
 XX
 KW Chiral; phosphorothioate; oligonucleotide synthesis; enantiomer; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages"
 XX
 PN WO2002102815-A2.
 XX
 PD 27-DEC-2002.
 XX
 XX 13-JUN-2002; 2002WO-US018581.
 XX
 PR 14-JUN-2001; 2001US-00881535.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Ravikumar VT;
 XX
 DR WPI; 2003-157021/15.
 XX
 PT Preparing internucleotide phosphorothioate linkage enhanced in Sp/Rp
 PT enantiomer, by coupling a synthon with 2'-substituted nucleoside in
 PT presence of coupling agent having a pKa that enhances linkage in Sp/Rp
 PT enantiomer.
 XX
 PS Example 1; Page 31; 65pp; English.

XX The present invention describes a method (M1) for preparing an
 CC internucleotide phosphorothioate linkage enriched in the Sp or Rp
 CC enantiomer between a synthon having a hydroxyl moiety at the 5' position
 CC and a 2'-substituted nucleoside having an activated phosphate moiety at
 CC the 3'-position, comprising coupling a synthon with a 2'-substituted
 CC nucleoside in the presence of coupling agent that is selected to enhance
 CC either the Rp or Sp enantiomer according to its pKa. This method is
 CC useful for preparing an oligonucleotide having at least one region of
 CC internucleotide linkages that is enhanced in the Sp or Rp enantiomer,
 CC which involves providing a nucleotide having a hydroxyl moiety at the 5'-
 CC position or a growing oligonucleotide chain having a hydroxyl moiety at
 CC the 5'-position, coupling the nucleotide or growing oligonucleotide chain
 CC to a 2'-substituted nucleoside having an activated phosphate moiety at

CC the 3' position in the presence of the coupling agent, and repeating the
 CC coupling step until the desired number of linkages is established. The
 CC oligonucleotide having a region of internucleotide linkages that is
 CC enhanced in the Sp enantiomer is further processed to include another
 CC region of internucleotide linkages that is enhanced in the Sp and/or Rp
 CC enantiomer. Oligonucleotides prepared by the method lead to improved
 CC drugs, diagnostics and research reagents. The present sequence represents
 CC an oligonucleotide used in the exemplification of the present invention
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 523
 ABD24497
 ID ABD24497 standard; DNA; 20 BP.

AC ABD24497;

XX 29-JUL-2004 (first entry)

XX A1652901-derived oligonucleotide SEQ ID 3509.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3509; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, cystic fibrosis, allergic rhinitis, pulmonary
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 524

ABD25047

ID ABD25047 standard; DNA; 20 BP.

XX ABD25047;

XX 29-JUL-2004 (first entry)

XX A1128305-derived oligonucleotide SEQ ID 4059.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

PS Claim 15; SEQ ID NO 4059; 763pp; English.

XX This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 525

ABD25316

ID ABD25316 standard; DNA; 20 BP.

AC ABD25316;

XX

DT 29-JUL-2004 (first entry)

XX

DE AI092429-derived oligonucleotide SEQ ID 4328.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

XX W0200285309-A2.

PN

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

XX 24-APR-2001; 2001US-0286036P.

PR

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-093058/08.

XX

PT Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX

PS Claim 15; SEQ ID NO 4328; 763pp; English.

XX

CC This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 526

ABD21763

ID ABD21763 standard; DNA; 20 BP.

XX

AC ABD21763;

XX

DT 29-JUL-2004 (first entry)

XX

DE Human stannocalcin-derived oligo SEQ ID 775.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX


```

KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
OS WO200285309-A2.
PN 31-OCT-2002.
PD 23-APR-2002; 2002WO-US011143.
PF 24-APR-2001; 2001US-0286036P.
XX (EPIC-) EPIGENESIS PHARM INC.
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX Claim 15; SEQ ID NO 775; 763pp; English.
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 527
ABD25246
ID ABD25246 standard; DNA; 20 BP.
XX
AC ABD25246;

```

```

XX 29-JUL-2004 (first entry)
XX AI051839-derived oligonucleotide SEQ ID 4258.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
OS WO200285309-A2.
PN 31-OCT-2002.
PD 23-APR-2002; 2002WO-US011143.
PF 24-APR-2001; 2001US-0286036P.
XX (EPIC-) EPIGENESIS PHARM INC.
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX Claim 15; SEQ ID NO 4258; 763pp; English.
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;

```



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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 528
ID ABD24849 standard; DNA; 20 BP.
AC ABD24849;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI092623-derived oligonucleotide SEQ ID 3861.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 3861; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

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CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system,
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 529
ID ABD25470 standard; DNA; 20 BP.
XX
AC ABD25470;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI041212-derived oligonucleotide SEQ ID 4482.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4482; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition

```

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytosstatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;

XX
 CC Query Match 0.7%; Score 20; DB 1; Length 20;
 CC Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 1 CTAAGAAAAA 20

RESULT 530
 ABD21665/c
 ID ABD21665 standard; DNA; 20 BP.
 AC ABD21665;
 XX
 DT 29-JUL-2004 (first entry)
 DE Human stannocalcin-derived oligo SEQ ID 677.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasaga A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 677; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
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 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

XX
 CC Query Match 0.7%; Score 20; DB 1; Length 20;
 CC Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAA 2728
 DB 20 AAAAAA 1

RESULT 531
 ABD24796
 ID ABD24796 standard; DNA; 20 BP.
 XX
 AC ABD24796;
 XX
 DT 29-JUL-2004 (first entry)
 DE A112689-derived oligonucleotide SEQ ID 3808.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.

```

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 3808; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
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CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
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CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 532
ABD25045
XX ABD25045 standard; DNA; 20 BP.
XX
XX ABD25045;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1128305-derived oligonucleotide SEQ ID 4057.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.

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XX Homo sapiens.
XX OS
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4057; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
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CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
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CC with a disease or condition such as pulmonary vasoconstriction,
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 533
ABD25350
XX ABD25350 standard; DNA; 20 BP.
XX
XX ABD25350;
XX

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DT 29-JUL-2004 (first entry)
DE AI096522-derived oligonucleotide SEQ ID 4362.
XX Human; antitense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013143.
XX 24-APR-2001; 2001US-0286036P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antitense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX Claim 15; SEQ ID NO 4362; 763pp; English.
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX Query Match 0.78; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

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RESULT 534
ABD25245
ID ABD25245 standard; DNA; 20 BP.
XX ABD25245;
XX 29-JUL-2004 (first entry)
XX
XX AI051839-derived oligonucleotide SEQ ID 4257.
XX

```

```

KW Human; antitense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013143.
XX 24-APR-2001; 2001US-0286036P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX

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XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antitense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX Claim 15; SEQ ID NO 4257; 763pp; English.

```

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XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

```

CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 AC ABD25409;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A122807-derived oligonucleotide SEQ ID 4421.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4421; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 DB 1 TAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 536
 ABD25169
 ID ABD25169 standard; DNA; 20 BP.
 XX
 AC ABD25169;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1041482-derived oligonucleotide SEQ ID 4181.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4181; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 537
 ID ABD25471 standard; DNA; 20 BP.
 AC ABD25471;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AI041212-derived oligonucleotide SEQ ID 4483.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX WC020285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4483; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 538
 ID ABD24795 standard; DNA; 20 BP.
 XX
 AC ABD24795;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AI122689-derived oligonucleotide SEQ ID 3807.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 540
 ABD25934
 ID ABD25934 standard; DNA; 20 BP.
 AC ABD25934;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA505075-derived oligonucleotide SEQ ID 4946.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4946; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC asthma, impeded respiration, respiratory
 CC inflammation, allergies, asthma, cystic fibrosis, allergic rhinitis, pulmonary
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 541
 ABD25935
 ID ABD25935 standard; DNA; 20 BP.
 XX
 AC ABD25935;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA505075-derived oligonucleotide SEQ ID 4947.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4947; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 542
 ABD25936
 ID ABD25936 standard; DNA; 20 BP.
 XX
 AC ABD25936;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA505075-derived oligonucleotide SEQ ID 4948.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4948; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 543
 ABD21541/c
 ID ABD21541 standard; DNA; 20 BP.
 XX
 AC ABD21541;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE S100 calcium binding protein A2-derived oligo SEQ ID 553.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 553; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 544
 ABD25671
 ID ABD25671 standard; DNA; 20 BP.
 XX
 AC ABD25671;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX A1024215-derived oligonucleotide SEQ ID 4683.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; cytostatic; pulmonary
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 OS

XX WO200285309-A2.
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4683; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 545
 ABD26880
 ID ABD26880 standard; DNA; 20 BP.
 XX
 AC ABD26880;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX

AA278764-derived oligonucleotide SEQ ID 5892.

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

Homo sapiens.

WO200285309-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S; WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 5892; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cyostatic activity, is a beta-adrenergic agonist, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 546

ABD24850

ID ABD24850 standard; DNA; 20 BP.

XX ABD24850;

XX 29-JUL-2004 (first entry)

XX A1092623-derived oligonucleotide SEQ ID 3862.

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

Homo sapiens.

WO200285309-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S; WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 3862; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cyostatic activity, is a beta-adrenergic agonist, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 547
 ABD25532
 ID ABD25532 standard; DNA; 20 BP.

XX ABD25532;

XX 29-JUL-2004 (first entry)

XX A1125651-derived oligonucleotide SEQ ID 4544.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX PN W0200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 4544; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 548

ABD25046

ID ABD25046 standard; DNA; 20 BP.

XX ABD25046;

XX 29-JUL-2004 (first entry)

XX A1128305-derived oligonucleotide SEQ ID 4058.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX PN W0200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 4058; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 549

ABD25044

ID ABD25044 standard; DNA; 20 BP.

XX ABD25044;

XX 29-JUL-2004 (first entry)

XX A1128305-derived oligonucleotide SEQ ID 4056.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX DR

WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 4056; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 XX comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 550

ABD25111

ID ABD25111 standard; DNA; 20 BP.

XX ABD25111;

XX 29-JUL-2004 (first entry)

XX A1125228-derived oligonucleotide SEQ ID 4123.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX

PN WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4123; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
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 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 551
 AD220571/C
 ID AD220571 standard; DNA; 20 BP.
 XX
 XX AD220571;
 XX
 XX 16-JUN-2005 (first entry)
 DT
 XX Gene expression detection related oligo, SEQ ID 3.
 DE

XX DNA amplification; DNA detection; gene expression; ss.
 KW Synthetic.
 OS
 XX JP2003274975-A.
 PN
 XX 30-SEP-2003.
 PD
 XX 22-MAR-2002; 2002JP-00124983.
 PF
 XX 22-MAR-2002; 2002JP-00124983.
 PR
 XX (TOYM) TOYOBO KK.
 PA
 XX WPI; 2003-869441/81.
 DR
 XX Amplifying a nucleic acid comprises synthesizing a DNA fragment with
 PT first and second consensus sequences and performing PCR.
 PT
 XX Example 7; SEQ ID NO 3; 15pp; Japanese.
 PS
 XX The invention relates to a novel method for amplifying a nucleic acid.
 CC The method involves: synthesizing a DNA fragment having a first consensus
 CC sequence, which is not contained in the 5' terminal of the nucleic acid;
 CC adding a homopolymer to the 3' end using a terminal deoxynucleotide
 CC transferase; synthesizing a DNA fragment having a second consensus
 CC sequence at both ends using primers complementary to the homopolymer; and
 CC performing PCR using the first and second primers. The invention further
 CC comprises: a method for preparing a labeled nucleic acid, which involves
 CC the steps of the novel method above in which the PCR is performed using a
 CC label or primers; a nucleic acid detection system containing labeled
 CC nucleic acid, nucleic acid probe and immobilized solid-phase support body
 CC ; a gene-expression monitoring system, comprising a solid-phase support,
 CC a nucleic acid probe and labeled nucleic acid; a kit for amplifying
 CC nucleic acids, comprising terminal deoxynucleotidyl transferase, a
 CC selected deoxynucleotide, DNA polymerase, first and second consensus
 CC sequence and a first and second primer having partially the same sequence
 CC as the first and second consensus sequences; and a kit for labeling
 CC nucleic acids, comprising the components of the kit and labeled
 CC nucleotides. This polynucleotide sequence represents an oligonucleotide
 CC used in the method for detecting nucleic acids expressed in a sample of
 CC the invention.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 552
 ADH08684
 ID ADH08684 standard; DNA; 20 BP.
 XX
 XX ADH08684;
 XX
 XX 11-MAR-2004 (first entry)
 DT
 XX Nanotechnology nucleic acid detection method associated #54.
 DE
 XX Linking oligonucleotide; ss; nucleic acid detection;
 KW nanoparticle-oligonucleotide conjugate.
 KW
 XX Synthetic.
 OS
 XX US2002137070-A1.
 PN
 XX 26-SEP-2002.
 PD


```

XX PF 10-OCT-2001; 2001US-00973638.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059018/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and
XX PT DNA sequencing, comprises observing detectable change caused by
XX PT hybridization of nucleic acid with substrate or particle bound
XX PT oligonucleotides.
XX PS Example 18; SEQ ID NO 55; 130pp; English.
XX CC The invention relates to a method of detecting a nucleic acid with at
XX CC least two portions by providing a type of nanoparticle-oligonucleotide
XX CC conjugate, contacting the nucleic acid and nanoparticles to allow
XX CC hybridisation of the oligonucleotides with the two or more portions of
XX CC the nucleic acid and observing a detectable change brought about by
XX CC hybridisation. The oligonucleotides have a sequence complementary to the
XX CC sequence of at least two portions of the nucleic acid. Hybridisation to the
XX CC oligonucleotides on the nanoparticles with the nucleic acid results
XX CC in a detectable change. This sequence represents a linking
XX CC oligonucleotide of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 553
ADH08814
ID ADH08814 standard; DNA; 20 BP.
XX AC ADH08814;
XX DT 11-MAR-2004 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.
XX KW Linking oligonucleotide; ss; nucleic acid detection;
XX KW nanoparticle-oligonucleotide conjugate.
XX OS Synthetic.
XX PN US2002137072-A1.
XX PD 26-SEP-2002.
XX PF 12-OCT-2001; 2001US-00976617.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.

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XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059020/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and
XX PT DNA sequencing, comprises observing detectable change caused by
XX PT hybridization of nucleic acid with substrate or particle bound
XX PT oligonucleotides.
XX PS Example 18; SEQ ID NO 55; 130pp; English.
XX CC The invention relates to a method of detecting a nucleic acid with at
XX CC least two portions by providing a type of nanoparticle-oligonucleotide
XX CC conjugate, contacting the nucleic acid and nanoparticles to allow
XX CC hybridisation of the oligonucleotides with the two or more portions of
XX CC the nucleic acid and observing a detectable change brought about by
XX CC hybridisation. The oligonucleotides have a sequence complementary to the
XX CC sequence of at least two portions of the nucleic acid. Hybridisation to the
XX CC oligonucleotides on the nanoparticles with the nucleic acid results
XX CC in a detectable change. This sequence represents a linking
XX CC oligonucleotide of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 554
ADH08749
ID ADH08749 standard; DNA; 20 BP.
XX AC ADH08749;
XX DT 11-MAR-2004 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.
XX KW Linking oligonucleotide; ss; nucleic acid detection;
XX KW nanoparticle-oligonucleotide conjugate.
XX OS Synthetic.
XX PN US2002137071-A1.
XX PD 26-SEP-2002.
XX PF 10-OCT-2001; 2001US-00974007.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059019/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and

```

PT DNA sequencing, comprises observing detectable change caused by
PT hybridization of nucleic acid with substrate or particle bound
XX oligonucleotides.

XX Example 18; SEQ ID NO 55; 130pp; English.

CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridization of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 556

ADI34492
ID ADI34492 standard; DNA; 20 BP.

XX AC ADI34492;

XX 22-APR-2004 (first entry)

XX Nucleotide sequence of a da20 oligonucleotide.

XX Nucleic acid amplification; RNA transcription; RNA polymerase; ss; T7.

XX Synthetic.

XX WO2003102243-A1.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-US017103.

XX 31-MAY-2002; 2002US-0384454P.

XX (JANC) JANSSEN PHARM NV.

XX Kamme FC, Zhu JY;

XX WPI; 2004-035466/03.

XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
PT RNA transcription from a polynucleotide template, comprises eliminating
PT single-stranded oligonucleotide from the transcription sample.

XX Example 2; SEQ ID NO 11; 26pp; English.

XX The invention relates to amplifying for RNA in a sample comprises
CC eliminating single-stranded oligonucleotide from the transcription
CC sample. The method involves synthesizing single-stranded cDNA by
CC incubating the sample RNA with reverse transcriptase and an
CC oligonucleotide primer that primes synthesis in a direction toward 5' end
CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
CC to form a transcription sample containing a cDNA template; eliminating
CC single-stranded oligonucleotide from the transcription sample; and
CC transcribing the cDNA template into RNA using an RNA polymerase. The
CC method is useful for improving RNA polymerase based RNA transcription
CC from a polynucleotide template. The method inhibits the undesired non-

CC template derived production of RNA in the transcription reaction. The
CC present sequence represents an oligonucleotide used to exemplify RNA
CC transcription in the presence of single- and double-stranded
CC oligonucleotides.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 556

ADI47212
ID ADI47212 standard; DNA; 20 BP.

XX AC ADI47212;

XX 22-APR-2004 (first entry)

XX Molecule analysing microchannel method related probe #2.

XX laminar flow; micro channel; complex; selectively promoted; fluorescence;
KW probe; ss.

XX Unidentified.

XX WO2004010140-A1.

XX 29-JAN-2004.

XX 18-JUL-2003; 2003WO-JP009142.

XX 19-JUL-2002; 2002JP-00211462.

XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

XX Yamashita K, Maeda H, Shimizu H, Miyazaki M, Nakamura H;

XX Yamaguchi Y;

XX WPI; 2004-180318/17.

XX Analysis of sample molecules such as DNA fragment, by using micro channel
PT to form laminar flow of specimen molecule-containing solution and complex
PT forming molecule containing solution.

XX Example 1; Page 9; 19pp; Japanese.

XX The invention relates to a novel method involving forming a laminar flow,
CC by passing into a micro channel, a solution containing the specimen
CC molecules, and a solution containing probe molecules capable of forming a
CC complex with the specimen molecules. The dispersion of the formed complex
CC is selectively promoted, based on their affinity, and the degree of
CC dispersion of the complex formed between the specimen molecules and the
CC probe molecules is detected and analysed. The probe molecules are capable
CC of producing fluorescence. This polynucleotide sequence represents an
CC oligo used in the exemplification of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

CC polymerase chain reaction amplification. The detected nucleic acid may be
 CC utilised for diagnosis of disease, sequencing of nucleic acids,
 CC forensics, paternity testing, cell line authentication and monitoring
 CC gene therapy. The method for detecting the nucleic acids is based on
 CC observing a colour change with the naked eye and is cheap, fast, simple,
 CC and robust, requiring no specialised or expensive equipment. The current
 CC sequence is that of the oligonucleotide which is related to a thiol-
 CC modified oligonucleotide-gold colloid conjugate probe of the invention.
 XX

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Mismatches 0; Indels 0; Gaps 0;
 Matches 20; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 559

ID ADI32905

ADI32905 standard; DNA; 20 BP.

XX

AC ADI32905;

XX 06-MAY-2004 (first entry)

XX Synthetic thiol-modified oligo-gold colloid conjugate probe - SEQ 55.

XX nanoparticle; gold; disease; forensic; paternity testing;

KW cell line authentication; gene therapy; ss; gold colloid conjugate;

KW probe.

XX Synthetic.

XX US2003207296-A1.

XX 06-NOV-2003.

XX 08-OCT-2002; 2002US-00266983.

XX 29-JUL-1996; 96US-0031809P.

XX 21-JUL-1997; 97WO-US012783.

XX 29-JAN-1999; 99US-00240755.

XX 25-JUN-1999; 99US-00344667.

XX 13-JAN-2000; 2000US-0176409P.

XX 28-MAR-2000; 2000US-0192699P.

XX 26-APR-2000; 2000US-0200461P.

XX 26-JUN-2000; 2000US-00603830.

XX 11-AUG-2000; 2000US-0213906P.

XX 08-DEC-2000; 2000US-0254392P.

XX 08-DEC-2000; 2000US-0254418P.

XX 11-DEC-2000; 2000US-0255235P.

XX 12-DEC-2000; 2000US-0255236P.

XX 12-JAN-2001; 2001US-00760500.

XX 28-MAR-2001; 2001US-00820279.

XX 09-APR-2001; 2001US-0282640P.

XX 10-AUG-2001; 2001US-00927777.

XX 09-OCT-2001; 2001US-0327864P.

XX 07-DEC-2001; 2001US-00008978.

XX (PARK/) PARK S.

XX (TATO/) TATON T A.

XX (MIRK/) MIRKIN C A.

XX Park S, Taton TA, Mirkin CA;

XX WPI; 2004-059754/06.

XX Detection of nucleic acid, e.g. viral RNA or DNA, comprises contacting

XX nucleic acid with different types of nanoparticles having attached

PT

PT oligonucleotides and observing detectable change brought about by
 PT hybridization.

XX Example 18; SEQ ID NO 55; 206pp; English.

XX The invention relates to a novel method for detecting a nucleic acid
 CC having at least two portions comprising contacting the nucleic acid with
 CC at least two types of nanoparticles, such as gold, having attached
 CC oligonucleotides and observing a detectable change brought about by
 CC hybridisation of the oligonucleotides on the nanoparticles with the
 CC nucleic acid. The method of the invention may be useful for detecting a
 CC nucleic acid, preferably viral RNA or DNA, bacterial DNA, a gene
 CC associated with a disease, a fungal DNA, synthetic DNA or RNA, a product of a
 CC structurally modified natural or synthetic DNA or RNA or a product of a
 CC polymerase chain reaction amplification. The detected nucleic acid may be
 CC utilised for diagnosis of disease, sequencing of nucleic acids,
 CC forensics, paternity testing, cell line authentication and monitoring
 CC gene therapy. The method for detecting the nucleic acids is based on
 CC observing a colour change with the naked eye and is cheap, fast, simple,
 CC and robust, requiring no specialised or expensive equipment. The current
 CC sequence is that of the synthetic thiol-modified oligonucleotide-gold
 CC colloid conjugate probe of the invention which is linked via a thiol
 CC group to a gold nanoparticle.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 560

ADK69880/c

ID ADK69880 standard; DNA; 20 BP.

XX

AC ADK69880;

XX 06-MAY-2004 (first entry)

XX Sulphurised oligonucleotide #10.

XX Phosphorothioate backbone; sulphurised oligonucleotide; ss.

XX Unidentified.

XX Key Location/Qualifiers

modified_base 1..20

/tag= a

/mod_base= OTHER

/note= "Phosphorothioate backbone; 2'-O-methoxyethyl

residues"

XX US2003212267-A1.

XX 13-NOV-2003.

XX 12-DEC-2002; 2002US-00181200.

XX 11-JAN-2000; 2000US-00481486.

XX 10-JAN-2001; 2001WO-US000715.

XX (COLE/) COLE D L.

XX (RAVI/) RAVIKUMAR V T.

XX (CHER/) CHERUVALLATH Z S.

XX Cole DL, Ravikumar VT, Cheruvallath ZS;

XX WPI; 2004-069376/07.

XX

```

PT Preparation of phosphorothioate oligonucleotides involves oxidizing
PT phosphite intermediate with acetyl disulfide in acetonitrile for time to
XX effect conversion of phosphite intermediate to phosphorothioate.
XX
XX Example 12; SEQ ID NO 10; 8pp; English.
XX
XX The invention relates to phosphorothioate oligonucleotides having
XX nucleoside with 240 modification are prepared by phosphorylating 5'-
XX hydroxyl of a nucleic acid moiety having a nucleoside with 2'
XX modification in an acetonitrile containing solvent mixture to form a
XX phosphite intermediate; and oxidising the phosphite intermediate with an
XX acetyl disulfide in an acetonitrile for a time to effect conversion of
XX the phosphite intermediate to phosphorothioate. The invented method
XX achieves high yields and greater efficiency. The present sequence is
XX sulphurised oligonucleotide used in the exemplification of the invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 561
ADK69885/C
ID ADK69885 standard; DNA; 20 BP.
XX
XX AC ADK69885;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Sulphurised oligonucleotide #15.
XX
XX KW Phosphorothioate backbone; sulphurised oligonucleotide; ss.
XX
XX OS Unidentified.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod base= OTHER
XX FT /note= "Phosphorothioate backbone; 2'-O-methoxyethyl
XX FT residues"
XX
XX PN US2003212267-A1.
XX
XX PT 13-NOV-2003.
XX
XX PF 12-DEC-2002; 2002US-00181200.
XX
XX PR 11-JAN-2000; 2000US-00481486.
XX
XX PR 10-JAN-2001; 2001WO-US000715.
XX
XX (COLE/) COLE D L.
XX
XX PA (RAVI/) RAVIKUMAR V T.
XX
XX PA (CHER/) CHERUVALLATH Z S.
XX
XX PI Cole DL, Ravikumar VT, Cheruvallath ZS;
XX WPI; 2004-069376/07.
XX
XX PT Preparation of phosphorothioate oligonucleotides involves oxidizing
XX phosphite intermediate with acetyl disulfide in acetonitrile for time to
XX effect conversion of phosphite intermediate to phosphorothioate.
XX
XX Example 22; SEQ ID NO 15; 8pp; English.
XX
XX The invention relates to phosphorothioate oligonucleotides having
XX nucleoside with 240 modification are prepared by phosphorylating 5'-

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CC hydroxyl of a nucleic acid moiety having a nucleoside with 2'
CC modification in an acetonitrile containing solvent mixture to form a
CC phosphite intermediate; and oxidising the phosphite intermediate with an
CC acetyl disulfide in an acetonitrile for a time to effect conversion of
CC the phosphite intermediate to phosphorothioate. The invented method
CC achieves high yields and greater efficiency. The present sequence is
CC sulphurised oligonucleotide used in the exemplification of the invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match          0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 562
ADK74969/C
ID ADK74969 standard; DNA; 20 BP.
XX
XX AC ADK74969;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2303.
XX
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX
XX OS Synthetic.
XX
XX PN WO2004016754-A2.
XX
XX PD 26-FEB-2004.
XX
XX PF 14-AUG-2003; 2003WO-US025465.
XX
XX PR 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX PI Roberts SL;
XX
XX WPI; 2004-203785/19.
XX
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX Nav1.3, useful for treating a disease or condition associated
XX with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX
XX PS Claim 4; SEQ ID NO 2303; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
XX nucleic acid molecule encoding Nav1.3, where the antisense compound
XX specifically hybridizes with and inhibits the expression of Nav1.3. The
XX compound and composition are useful for treating a disease or condition
XX associated with Nav1.3, e.g. pain including but not limited to
XX neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX pain from burns, migraine headache, cluster headache, mild-to-moderate
XX headache; seizure disorder such as childhood seizure disorder, including
XX but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX sequence represents a chimeric phosphorothioate oligonucleotide with
XX 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX human Nav1.3 expression, the oligonucleotides are designed to target
XX different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

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RESULT 564

DT XX 01-JUL-2004 (first entry)

DE XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:179.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

KW reperfusion injury; ophthalmic disorder; immunological disorder;

KW cardiovascular disorder; neurological disorder; ss.

XX OS Homo sapiens.

OS Synthetic.

XX XX

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX XX

XX 08-APR-2004.

XX XX

XX 25-SEP-2003; 2003WO-US030374.

XX XX

XX 25-SEP-2002; 2002US-0413549P.

XX XX

XX (PHAA) PHARMACIA CORP.

XX XX

XX Gierse JK;

XX XX

XX WPI; 2004-305094/28.

XX XX

XX New antisense compound, having a sequence targeted to a nucleic acid

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,

PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX XX

XX Claim 4; SEQ ID NO 179; 132pp; English.

XX XX

XX The present sequence represents a chimeric antisense oligonucleotide

CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of

CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytosolic,

CC antiinflammatory, immunomodulatory, cardiant, neuroprotective,

CC antidiabetic, immunomodulatory and cardiovascular activities, and can

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

CC can be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX XX

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 566

ADM13994/c

ID ADM13994 standard; DNA; 20 BP.

XX AC

XX ADM13994;

XX XX

XX 01-JUL-2004 (first entry)

XX XX

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:181.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

KW reperfusion injury; ophthalmic disorder; immunological disorder;

KW cardiovascular disorder; neurological disorder; ss.

XX OS Homo sapiens.

OS Synthetic.

XX XX

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX XX

XX 08-APR-2004.

XX XX

XX 25-SEP-2003; 2003WO-US030374.

XX XX

XX 25-SEP-2002; 2002US-0413549P.

XX XX

XX (PHAA) PHARMACIA CORP.

XX XX

XX Gierse JK;

XX XX

XX WPI; 2004-305094/28.

XX XX

XX New antisense compound, having a sequence targeted to a nucleic acid

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,

PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX XX

XX Claim 4; SEQ ID NO 181; 132pp; English.

XX XX

XX The present sequence represents a chimeric antisense oligonucleotide

CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of

CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytosolic,

CC antiinflammatory, immunomodulatory, cardiant, neuroprotective,

CC antidiabetic, immunomodulatory and cardiovascular activities, and can

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

CC can be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX XX

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 567

ADM13999/c

ID ADM13999 standard; DNA; 20 BP.

XX

AC ADM13999;

XX 01-JUL-2004 (first entry)

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:186.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers
 modified_base 1..20

FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHUA) PHARMACIA CORP.

XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 186; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 568

ADM14008/c

ID ADM14008 standard; DNA; 20 BP.

XX

AC ADM14008;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:195.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers
 modified_base 1..20

FT /*tag= b
 FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

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FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT      modified_base      16. .20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
XX      WO2004028458-A2.
XX
XX      08-APR-2004.
XX
XX      25-SEP-2003; 2003WO-US030374.
XX
XX      25-SEP-2002; 2002US-0413549P.
XX      (PHAA ) PHARMACIA CORP.
XX      Gierse JK;
XX      WPI; 2004-305094/28.
XX
XX      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
XX      Claim 4; SEQ ID NO 195; 132pp; English.
XX
XX      The present sequence represents a chimeric antisense oligonucleotide
XX      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX      human mPGES-1 gene is located on chromosome 9, more specifically to
XX      9q34.3. The present invention also describes: (1) antisense compounds,
XX      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX      inhibits its expression; (2) a method of inhibiting the expression of
XX      mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX      antisense oligonucleotides and antisense compounds have cytostatic,
XX      antidiabetic, immunomodulator, cardiant, neuroprotective,
XX      antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX      ophthalmological, immunomodulatory and cardiovascular activities, and can
XX      be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX      can be used for preparing a composition for treating a disease or
XX      condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX      disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX      ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX      Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Oy      2709 AAAAAAAAAAAAAAAAAA 2728
Db      20 AAAAAAAAAAAAAAAAAA 1

RESULT 569
ADM14002/C
ID      ADM14002 standard; DNA; 20 BP.
XX
XX      ADM14002;
XX
XX      01-JUL-2004 (first entry)
XX
XX      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:189.
XX
XX      chimeric; antisense oligonucleotide; phosphorothioate; human;
XX      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX      microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX      immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX      neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

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KW      immunomodulatory; cardiovascular; gene therapy; inflammation;
KW      Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW      reperfusion injury; ophthalmic disorder; immunological disorder;
KW      cardiovascular disorder; neurological disorder; sg.
XX
XX      Homo sapiens.
XX      Synthetic.

```

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Key      Location/Qualifiers
FT      modified_base      1. .20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "phosphorothioate linkages and all cytidine
FT      residues are 5-methylcytidines"
FT      modified_base      1. .5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT      modified_base      16. .20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"

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WO2004028458-A2.

08-APR-2004.

25-SEP-2003; 2003WO-US030374.

25-SEP-2002; 2002US-0413549P.

(PHAA) PHARMACIA CORP.

Gierse JK;

WPI; 2004-305094/28.

New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.

Claim 4; SEQ ID NO 189; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antidiabetic, immunomodulator, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAA 1

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 571
 ADM14151/c
 ID ADM14151 standard; DNA; 20 BP.
 XX
 AC ADM14151;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:338.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cycostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 WO2004028458-A2.
 08-APR-2004.
 25-SEP-2003; 2003WO-US030374.
 25-SEP-2002; 2002US-0413549P.
 (PHAA) PHARMACIA CORP.
 Gierse JK;
 WPI; 2004-305094/28.
 New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.
 Claim 4; SEQ ID NO 277; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cycostatic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can

RESULT 570
 ADM14090/c
 ID ADM14090 standard; DNA; 20 BP.
 XX
 AC ADM14090;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:277.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cycostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 WO2004028458-A2.
 08-APR-2004.
 25-SEP-2003; 2003WO-US030374.
 25-SEP-2002; 2002US-0413549P.
 (PHAA) PHARMACIA CORP.
 Gierse JK;
 WPI; 2004-305094/28.
 New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.
 Claim 4; SEQ ID NO 277; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cycostatic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can

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XX PS Claim 4; SEQ ID NO 338; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (MPGES-1). The
XX CC human MPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC MPGES-1, which specifically hybridise with the nucleic acid MPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC MPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with MPGES-1. MPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as MPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with MPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db ||||| 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 572
ADM13997/c
ID ADM13997 standard; DNA; 20 BP.
XX AC ADM13997;
XX DT 01-JUL-2004 (first entry)
XX DE Human MPGES-1 chimeric antisense oligonucleotide SEQ ID NO:184.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; MPGES-1; MPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..15 /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20 /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.

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PD 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030374.
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding MPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX Claim 4; SEQ ID NO 184; 132pp; English.
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (MPGES-1). The
XX human MPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX MPGES-1, which specifically hybridise with the nucleic acid MPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX MPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with MPGES-1. MPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as MPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with MPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db ||||| 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 573
ADM14017/c
ID ADM14017 standard; DNA; 20 BP.
XX AC ADM14017;
XX DT 01-JUL-2004 (first entry)
XX DE Human MPGES-1 chimeric antisense oligonucleotide SEQ ID NO:204.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; MPGES-1; MPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers

```

```

FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 204; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 574
ADM14018/c
ID ADM14018 standard; DNA; 20 BP.
XX
XX ADM14018;
XX
XX 01-JUL-2004 (first entry)
XX

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DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:205.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; Gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 205; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;

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Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 575
ADM14088/c
ID ADM14088 standard; DNA; 20 BP.
XX
AC ADM14088;
XX
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:275.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
PA Gierse JK;
XX
PI WPI; 2004-305094/28.
XX
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 275; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

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inhibits its expression; (2) a method of inhibiting the expression of
mPGES-1 in cells or tissues; and (3) a method of treating an animal
having a disease or condition associated with mPGES-1. mPGES-1 chimeric
antisense oligonucleotides and antisense compounds have cytostatic,
antidiabetic, immunomodulator, cardiant, neuroprotective,
antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
ophthalmological, immunomodulatory and cardiovascular activities, and can
be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
can be used for preparing a composition for treating a disease or
condition associated with mPGES-1 e.g., inflammation, Alzheimer's
disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 576
ADM14257/c
ID ADM14257 standard; DNA; 20 BP.
XX
AC ADM14257;
XX
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:444.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
PA Gierse JK;
XX
PI

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XX DR WPI; 2004-305094/28.
XX
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX
XX PS Claim 4; SEQ ID NO 444; 132pp; English.
XX
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 577
ADM14000/c
ID ADM14000 standard; DNA; 20 BP.
XX AC ADM14000;
XX
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:187.
XX
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX OS Homo sapiens.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX
XX FT modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX
XX FT modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX

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FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX PN WO2004028458-A2.
XX
XX PD 08-APR-2004.
XX
XX XX 25-SEP-2003; 2003WO-US030374.
XX
XX PR 25-SEP-2002; 2002US-0413549P.
XX
XX PA (PHAA ) PHARMACIA CORP.
XX
XX PI Gierse JK;
XX
XX DR WPI; 2004-305094/28.
XX
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX
XX PS Claim 4; SEQ ID NO 187; 132pp; English.
XX
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 578
ADM14006/c
ID ADM14006 standard; DNA; 20 BP.
XX AC ADM14006;
XX
XX XX 01-JUL-2004 (first entry)
XX
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:193.
XX
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

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KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 OS Homo sapiens.
 XX Synthetic.
 XX Key Location/Qualifiers
 XX modified_base 1..20
 XX /*tag= b
 XX /mod_base= OTHER
 XX /note= "phosphorothioate linkages and all cytidine
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 193; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 579

ADM14014/c
 ID ADM14014 standard; DNA; 20 BP.
 XX ADM14014;
 XX 01-JUL-2004 (first entry)
 XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:201.
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 XX modified_base 1..20
 XX /*tag= b
 XX /mod_base= OTHER
 XX /note= "phosphorothioate linkages and all cytidine
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 201; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 580

ADM14020/c

ID ADM14020 standard; DNA; 20 BP.

AC ADM14020;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:207.

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 207; 132pp; English.

PS

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 581

ADM13991/c

ID ADM13991 standard; DNA; 20 BP.

XX ADM13991;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:178.

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX

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PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
FS Claim 4; SEQ ID NO 178; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 582
ADM14003/C
ID ADM14003 standard; DNA; 20 BP.
XX
AC ADM14003;
XX
XX 01-JUL-2004 (first entry)
DT
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:190.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= b
FT

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FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 190; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 583
ADM14005/C
ID ADM14005 standard; DNA; 20 BP.
XX
AC ADM14005;
XX
XX 01-JUL-2004 (first entry)
DT
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:192.
XX

```

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 192; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.78; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 584
ADM13995/c
ID ADM13995 standard; DNA; 20 BP.
XX
XX AC ADM13995;
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:182.
XX
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX OS Homo sapiens.
OS Synthetic.
XX
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 182; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 585

ADM14011/c

ID ADM14011 standard; DNA; 20 BP.

XX AC

ADM14011;

XX XX

01-JUL-2004 (first entry)

XX XX

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:198.

XX KW

chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX OS

Homo sapiens.

OS Synthetic.

XX XX

Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX FN

WO2004028458-A2.

XX XX

PD 08-APR-2004.

XX XX

PF 25-SEP-2003; 2003WO-US030374.

XX XX

PR 25-SEP-2002; 2002US-0413549P.

XX XX

PA (PHAA) PHARMACIA CORP.

XX XX

PI Gierse JK;

XX DR

WPI; 2004-305094/28.

XX

PT

PT

PT

PT

XX

PS

XX

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

XX

SQ

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 586

ADM14240/c

ID ADM14240 standard; DNA; 20 BP.

XX AC

ADM14240;

XX XX

01-JUL-2004 (first entry)

XX XX

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:427.

XX KW

chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;

KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

KW reperfusion injury; ophthalmic disorder; immunological disorder;

KW cardiovascular disorder; neurological disorder; ss.

XX KW

Homo sapiens.

OS Synthetic.

OS XX

Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

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FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
PN WO2004028458-A2.
PD 08-APR-2004.
XX
XX
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 427; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 587
ADM14009/c
ID ADM14009 standard; DNA; 20 BP.
XX
XX ADM14009;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:196.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.

```

```

XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 196; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 588
ADM14010/c
ID ADM14010 standard; DNA; 20 BP.

```

AC ADM14010;
 AC
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:197.
 DE
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1. .20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1. .5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16. .20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT
 FT WO2004028458-A2.
 XX
 XX
 PD 08-APR-2004.
 XX
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.
 DR
 DR New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 XX Claim 4; SEQ ID NO 197; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosolic,
 CC antiarthritic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 589
 ADM14089/c
 ID ADM14089 standard; DNA; 20 BP.
 XX
 AC ADM14089;
 XX
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:276.
 DE
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1. .20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1. .5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16. .20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT
 FT WO2004028458-A2.
 XX
 XX
 PD 08-APR-2004.
 XX
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.
 DR
 DR New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 XX Claim 4; SEQ ID NO 276; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC

CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 590
 ADM14016/c
 ID ADM14016 standard; DNA; 20 BP.

XX ADM14016;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:203.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

PR 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

DR New antisense compound, having a sequence targeted to a nucleic acid
 XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 203; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 591
 ADM14075/c
 ID ADM14075 standard; DNA; 20 BP.

XX ADM14075;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:262.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

```

FT modified_base      residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 262; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match      0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 592
ADM14189/c
ID ADM14189 standard; DNA; 20 BP.
XX
XX ADM14189;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:376.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

```

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XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; Gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX Key      Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 376; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match      0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

```

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Db      20 AAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 593
ADM13996/c
ID      ADM13996 standard; DNA; 20 BP.
XX
AC      ADM13996;
XX
DT      01-JUL-2004 (first entry)
XX
DE      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:183.
XX
KW      chimeric; antisense oligonucleotide; phosphorothioate; human;
KW      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW      microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW      immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW      neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW      immunomodulatory; cardiovascular; gene therapy; inflammation;
KW      Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW      reperfusion injury; ophthalmic disorder; immunological disorder;
KW      cardiovascular disorder; neurological disorder; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key
FH      Location/Qualifiers
FT      modified_base 1..20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "phosphorothioate linkages and all cytidine
FT      residues are 5-methylcytidines"
FT      modified_base 1..5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT      modified_base 16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
PN      WO2004028458-A2.
XX
PD      08-APR-2004.
XX
PF      25-SEP-2003; 2003WO-US030374.
XX
PP      25-SEP-2002; 2002US-0413549P.
XX
PR      (PHAA ) PHARMACIA CORP.
XX
PA      Gierse JK;
XX
PI      WPI; 2004-305094/28.
XX
DR      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
PS      Claim 4; SEQ ID NO 183; 132pp; English.
XX
CC      The present sequence represents a chimeric antisense oligonucleotide
CC      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC      human mPGES-1 gene is located on chromosome 9, more specifically to
CC      9q34.3. The present invention also describes: (1) antisense compounds,
CC      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC      inhibits its expression; (2) a method of inhibiting the expression of
CC      mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC      antisense oligonucleotides and antisense compounds have cytostatic,
CC      antidiabetic, immunomodulator, cardiant, neuroprotective,
CC      antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
CC      ophthalmological, immunomodulatory and cardiovascular activities, and can
CC      be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC      can be used for preparing a composition for treating a disease or
CC      condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC      disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC      ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ      Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      2709 AAAAAAAAAAAAAAAAAAAAA 2728
DB      20 AAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 594
ADM14001/c
ID      ADM14001 standard; DNA; 20 BP.
XX
AC      ADM14001;
XX
DT      01-JUL-2004 (first entry)
XX
DE      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:188.
XX
KW      chimeric; antisense oligonucleotide; phosphorothioate; human;
KW      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW      microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW      immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW      neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW      immunomodulatory; cardiovascular; gene therapy; inflammation;
KW      Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW      reperfusion injury; ophthalmic disorder; immunological disorder;
KW      cardiovascular disorder; neurological disorder; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key
FH      Location/Qualifiers
FT      modified_base 1..20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "phosphorothioate linkages and all cytidine
FT      residues are 5-methylcytidines"
FT      modified_base 1..5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT      modified_base 16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
PN      WO2004028458-A2.
XX
PD      08-APR-2004.
XX
PF      25-SEP-2003; 2003WO-US030374.
XX
PP      25-SEP-2002; 2002US-0413549P.
XX
PR      (PHAA ) PHARMACIA CORP.
XX
PA      Gierse JK;
XX
PI      WPI; 2004-305094/28.
XX
DR      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
PS      Claim 4; SEQ ID NO 183; 132pp; English.
XX
CC      The present sequence represents a chimeric antisense oligonucleotide
CC      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC      human mPGES-1 gene is located on chromosome 9, more specifically to
CC      9q34.3. The present invention also describes: (1) antisense compounds,
CC      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC      inhibits its expression; (2) a method of inhibiting the expression of
CC      mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC      antisense oligonucleotides and antisense compounds have cytostatic,
```

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 188; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, cardiant, neuroarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 595
XX ADM14004/c
XX ID ADM14004 standard; DNA; 20 BP.
XX AC ADM14004;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:191.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nortropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.
XX 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030374.
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX Claim 4; SEQ ID NO 191; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, cardiant, neuroarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 596
XX ADM14012/c
XX ID ADM14012 standard; DNA; 20 BP.
XX AC ADM14012;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:199.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nortropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.

```

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 199; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.78; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 597
XX ADM14015/c
XX ID ADM14015 standard; DNA; 20 BP.
XX
XX AC ADM14015;

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XX
DT 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:202.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulatory; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 202; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.78; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 597
XX ADM14015/c
XX ID ADM14015 standard; DNA; 20 BP.
XX
XX AC ADM14015;

```

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 598
 ADM14021/c
 ID ADM14021 standard; DNA; 20 BP.
 AC ADM14021;

XX 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:208.
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1..20 /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 modified_base 1..5 residues are 5-methylcytidines"
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20 /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 208; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to

9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antiarthritic, immunomodulatory, cardiant, neuroprotective,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 599
 ADM14388/c
 ID ADM14388 standard; DNA; 20 BP.
 AC ADM14388;

XX 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:575.
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1..20 /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 modified_base 1..5 residues are 5-methylcytidines"
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20 /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX

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PA (PHAA ) PHARMACIA CORP.
XX
XX
PI Gierse JK;
XX
XX WPI; 2004-305094/28.
DR
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX
XX Claim 4; SEQ ID NO 575; 132pp; English.
PS
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, cardiant, neuroprotective, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 600
ADM14013/c
ID ADM14013 standard; DNA; 20 BP.
XX
XX ADM14013;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:200.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1. .20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1. .5
XX

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FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 200; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, cardiant, neuroprotective, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 601
ADM14019/c
ID ADM14019 standard; DNA; 20 BP.
XX
XX ADM14019;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:206.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX immunomodulatory; cardiant; neuroprotective; antiinflammatory;
XX

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KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes; cancer or
 PT ischaemia.

XX Claim 4; SEQ ID NO 206; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 602
 ADM14087/c

ID ADM14087 standard; DNA; 20 BP.

XX ADM14087;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:274.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW immunomodulator; cardiant; neuroprotective; cytosstatic; antidiabetic;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

PN WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischaemia.

XX Claim 4; SEQ ID NO 274; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 603

ADM14300/c

ID ADM14300 standard; DNA; 20 BP.

XX AC ADM14300;

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:487.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX PD 08-APR-2004.

XX PF 25-SEP-2003; 2003WO-US030374.

XX PR 25-SEP-2002; 2002US-0413549P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Gierse JK;

XX DR WPI; 2004-305094/28.

XX PT New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX PS Claim 4; SEQ ID NO 487; 132pp; English.

XX CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 604

ADM13993/c

ID ADM13993 standard; DNA; 20 BP.

XX AC ADM13993;

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:180.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.

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XX PD 08-APR-2004.
XX FT
XX PF 25-SEP-2003; 2003WO-US030374.
XX FT
XX PR 25-SEP-2002; 2002US-0413549P.
XX FT
XX PA (PHAA ) PHARMACIA CORP.
XX FT
XX PI Gierse JK;
XX FT
XX DR WPI; 2004-305094/28.
XX FT
XX PT New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX FT
XX PS Claim 4; SEQ ID NO 180; 132pp; English.
XX FT
XX CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX FT
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 605
ADM13998/c
ID ADM13998 standard; DNA; 20 BP.
XX FT
XX AC ADM13998;
XX FT
XX DT 01-JUL-2004 (first entry)
XX FT
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:185.
XX FT
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX FT
XX OS Homo sapiens.
XX FT
XX SX Synthetic.

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FH Key modified_base Location/Qualifiers
FT 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
PN WO2004028458-A2.
XX FT
XX PD 08-APR-2004.
XX FT
XX PF 25-SEP-2003; 2003WO-US030374.
XX FT
XX PR 25-SEP-2002; 2002US-0413549P.
XX FT
XX PA (PHAA ) PHARMACIA CORP.
XX FT
XX PI Gierse JK;
XX FT
XX DR WPI; 2004-305094/28.
XX FT
XX PT New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX FT
XX PS Claim 4; SEQ ID NO 185; 132pp; English.
XX FT
XX CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX FT
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 606
ADM14007/c
ID ADM14007 standard; DNA; 20 BP.
XX FT
XX AC ADM14007;
XX FT
XX DT 01-JUL-2004 (first entry)

```

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:194.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsome prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsome prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulator; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX
PD 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 194; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsome prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosolic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 607
ADM14124/c
ID ADM14124 standard; DNA; 20 BP.
XX
XX ADM14124;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:311.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsome prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsome prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulator; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 311; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsome prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosolic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

CC mpGES-1, which specifically hybridise with the nucleic acid mpGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mpGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 608
 ADM14216/C
 ID ADM14216 standard; DNA; 20 BP.
 XX
 AC ADM14216;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mpGES-1 chimeric antisense oligonucleotide SEQ ID NO:403.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mpGES-1; mpGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

WO2004028458-A2.
 XX
 PN
 XX
 PD 08-APR-2004.
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 PA (PHAA) PHARMACIA CORP.

PI Gierse JK;
 XX
 DR WPI; 2004-305094/28.
 XX
 PT New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mpGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischaemia.
 XX
 PS Claim 4; SEQ ID NO 403; 132pp; English.
 XX
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The
 CC human mpGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mpGES-1, which specifically hybridise with the nucleic acid mpGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mpGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 609
 ADO03711
 ID ADO03711 standard; DNA; 20 BP.
 XX
 AC ADO03711;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE SERS-based analyte detection oligonucleotide seqid 31.
 XX
 KW Raman label; specific binding member; surface-enhanced Raman scattering;
 KW SERS; ss.
 XX
 OS Synthetic.
 XX
 PN US2004086897-A1.
 XX
 PD 06-MAY-2004.
 XX
 PF 07-MAY-2003; 2003US-00431341.
 XX
 PR 07-MAY-2002; 2002US-0378538P.
 PR 28-MAY-2002; 2002US-038330P.
 PR 14-JUN-2002; 2002US-00172428.
 XX
 PA (MIRK/) MIRKIN C A.
 PA (CAOY/) CAO Y.
 PA (JINR/) JIN R.
 XX
 PI Mirkin CA, Cao Y, Jin R;
 XX
 DR WPI; 2004-418413/39.

XX Reagent, useful for detecting target analyte e.g., nucleic acid.
 PT comprising particle having bound to at least one Raman label, which can
 PT be activated to provide surface-enhanced Raman scattering effect, and
 PT specific binding member.
 XX
 XX Disclosure; SEQ ID NO 31; 55pp; English.
 XX
 CC The invention describes a reagent (I) comprising a particle bound to at
 CC least one Raman label and a specific binding member, where the Raman
 CC label can be activated to provide a surface-enhanced Raman scattering
 CC (SERS) effect or comprising a specific binding member having two or more
 CC different Raman labels bound to it. Also described are: a test kit (II),
 CC comprising (I) in one container and a silver, gold or copper Raman
 CC enhancer stain in another container; and a fibre optic detection device
 CC (III), having a bundle of optical fibres terminating with ends of the
 CC optical fibre, where a several of the optical fibres have (I) located at
 CC the ends of the optical fibre. (I) is useful for: detecting for the
 CC presence or absence of one or more target analytes in a sample, the
 CC target analytes having at least two binding sites; detecting the presence
 CC or absence of one or more target nucleic acid in a sample, the sequence
 CC of the nucleic acid having at least two portions; and for screening one
 CC or more molecules to determine whether the molecule is a ligand to one or
 CC more specific receptors. This sequence represents an oligonucleotide
 CC associated with the SERS-based detection analyte detection method.
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 610
 ADP20152
 ID ADP20152 standard; DNA; 20 BP.
 XX
 AC ADP20152;
 XX
 XX 26-AUG-2004 (first entry)
 DT
 DE Nucleic acid detection method linking oligonucleotide #66.
 XX
 KW Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
 KW genetic disease; bacterial infection; viral infection; forensic;
 KW DNA sequencing; paternity testing; linking oligonucleotide; ss.
 XX
 OS Synthetic.
 OS
 XX US2004110220-A1.
 PN
 XX 10-JUN-2004.
 PD
 XX 18-NOV-2003; 2003US-00716829.
 PF
 XX 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 13-JAN-2000; 2000US-0176409P.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 PR 26-JUN-2000; 2000US-0213906P.
 PR 12-JAN-2001; 2001US-00760500.
 XX
 XX (NANO-) NANOSPHERE INC.
 PA
 XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA, Garimella V, Li Z;

XX WPI; 2004-440357/41.
 DR
 XX Nanoparticles useful for detection and separation of nucleic acids e.g.
 PT genes associated with disease, in a diagnostic assay, comprise several
 PT oligonucleotides attached to them.
 XX
 XX Example 24; SEQ ID NO 70; 142pp; English.
 XX
 CC The invention relates to a method of detecting a nucleic acid with at
 CC least two portions by providing a type of nanoparticle-oligonucleotide
 CC conjugate, contacting the nucleic acid and nanoparticles to allow
 CC hybridisation of the oligonucleotides with the two or more portions of
 CC the nucleic acid and observing a detectable change brought about by
 CC hybridisation. The oligonucleotides have a sequence complementary to the
 CC sequence of at least two portions of the nucleic acid. Hybridisation of
 CC the oligonucleotides on the nanoparticles with the nucleic acid results
 CC in a detectable change. The method is used for detection and separation
 CC of nucleic acids (e.g. viral DNA, a gene associated with a disease,
 CC bacterial DNA, fungal DNA, synthetic DNA, structurally-modified DNA, DNA
 CC from biological sources or PCR products) for diagnosis of various
 CC diseases (such as genetic diseases, bacterial infections and viral
 CC infections) and for forensics, DNA sequencing, paternity testing and
 CC monitoring gene therapy. This sequence represents a linking
 CC oligonucleotide of the invention.
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 611
 ADP20137
 ID ADP20137 standard; DNA; 20 BP.
 XX
 AC ADP20137;
 XX
 XX 26-AUG-2004 (first entry)
 DT
 DE Nucleic acid detection method linking oligonucleotide #54.
 XX
 KW Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
 KW genetic disease; bacterial infection; viral infection; forensic;
 KW DNA sequencing; paternity testing; linking oligonucleotide; ss.
 XX
 OS Synthetic.
 OS
 XX US2004110220-A1.
 PN
 XX 10-JUN-2004.
 PD
 XX 18-NOV-2003; 2003US-00716829.
 PF
 XX 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 13-JAN-2000; 2000US-0176409P.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 PR 26-JUN-2000; 2000US-0213906P.
 PR 12-JAN-2001; 2001US-00760500.
 XX
 XX (NANO-) NANOSPHERE INC.
 PA
 XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA, Garimella V, Li Z;

DT 02-DEC-2004 (first entry)
 XX Micro-channel molecule isolation related Adenine oligo.
 DE molecule isolation; micro-channel; molecular weight; micro flow path;
 KW polymer compound; flow behaviour; non turbulent flow; ss.
 KW Unidentified.
 XX
 OS WO2004076038-A1.
 PN
 PN
 PD 10-SEP-2004.
 PD
 XX 18-FEB-2004; 2004WO-JP001814.
 PF
 XX 18-FEB-2003; 2003JP-00039870.
 PR
 XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
 PA
 XX Yamashita K, Maeda H, Shimizu H, Miyazaki M, Nakamura H;
 PI Yamauchi Y;
 PI
 XX WPI; 2004-661906/64.
 DR
 XX Isolating molecules e.g., DNA, by introducing solution with two types of
 PT solute molecules into micro flow path to form non turbulent flow,
 PT providing physical action to molecule causing difference in flow
 PT behavior, separating molecules.
 PT
 PS Example 3; Page 7; 19pp; Japanese.
 PS
 XX The invention relates to a novel method for isolating molecules using a
 XX micro-channel. The molecules are isolated by introducing a mixed solution
 CC having two types of solute molecules differing in molecular weight into a
 CC micro flow path, to form a non turbulent flow, and providing physical
 CC action to the molecules by changing the flow state, thus causing
 CC different behaviours among different solute molecules, where the
 CC different behaviour enables uneven distribution of specific kinds of
 CC molecules in the flow path, causing separation of the molecules. The
 CC invention further comprises: molecule separation apparatus, comprising a
 CC substrate with a micro flow path, having one or more curved portions, a
 CC sample intake unit at one side and a sample removal opening at the other
 CC side, and a physical property detection sensor arranged inside the curved
 CC portion or outside the curved portion. The method is useful for isolating
 CC molecules, e.g. polymer compounds, DNA or proteins. The method enables
 CC simple and efficient separation of molecules by utilising specific flow
 CC behaviour in a non turbulent flow, in a micro flow path, where a large
 CC number of samples can be processed. This polynucleotide sequence
 CC represents an oligo used in the exemplification of the invention.
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.78; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 614
 ADU50633/C
 ID ADU50633 standard; DNA; 20 BP.
 XX
 XX AC ADU50633;
 XX
 XX 13-JAN-2005 (first entry)
 DT Human/rat stem cell factor, SCF, primer 220-7.
 DE
 XX Stem cell factor; SCF; haematopoietic; HT1080 fibrosarcoma cell line;
 KW 5637 bladder carcinoma cell line; leukopaemia; thrombocytopaenia;
 KW anaemia; bone marrow during transplant; bone marrow aplasia;
 KW myelosuppression; immune deficiency; neoplasm; nerve damage; infertility;
 KW intestinal damage; myeloproliferative disorder;
 KW early haematopoietic progenitor cell; haematopoietic disorders;
 KW aplastic anaemia; myelofibrosis; myeloclerosis; osteopetrosis;
 KW metastatic carcinoma; multiple myeloma; Hodgkin's disease; lymphoma;
 KW Gaucher's disease; Niemann-Pick disease; Diamond-Blackfan anaemia; DBA;
 KW Fanconi's anaemia; gene therapy; acute blood loss; ss; PCR; primer;
 KW probe.
 XX
 XX Homo sapiens.
 OS Rattus norvegicus.
 OS
 XX US2004181044-A1.
 PN
 XX 16-SEP-2004.
 PD
 XX 19-JUN-2002; 2002US-00175608.
 PF
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 07-JUN-1995; 95US-00486546.
 PR 07-AUG-2000; 2000US-00635249.
 PR
 XX (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGS/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
 DR WPI; 2004-707481/69.
 DR
 XX Novel stem cell factor (SCF) such as non-naturally-occurring SCF or
 PT naturally occurring SCF, useful for treating leukopenia,
 PT thrombocytopenia, anemia, and enhancing engraftment of bone marrow during
 PT transplantation.
 PT
 XX Example 3; SEQ ID NO 33; 216pp; English.
 PS
 XX The invention relates to a stem cell factor (SCF) such as non-naturally-
 CC occurring SCF having an amino acid sequence sufficiently duplicative of
 CC that of naturally occurring SCF to allow possession of a haematopoietic
 CC biological activity of naturally occurring stem cell factor, or naturally
 CC occurring SCF. Also included are an isolated DNA sequence for use in
 CC securing expression in a prokaryotic or eukaryotic host cell of non-
 CC naturally occurring SCF, a prokaryotic or eukaryotic host cell
 CC transformed or transfected with the DNA, a polypeptide product of the
 CC expression of the DNA in a prokaryotic or eukaryotic host cell, an
 CC isolated DNA sequence coding for prokaryotic or eukaryotic host
 CC expression of non-naturally occurring SCF, a DNA sequence coding for a
 CC polypeptide fragment or polypeptide analogue of naturally-occurring stem
 CC cell factor, a biologically functional plasmid or viral DNA vector
 CC including the DNA sequence above, a prokaryotic or eukaryotic host cell
 CC stably transformed or transfected with the DNA, a polypeptide having part
 CC or all of amino acid sequence encoded by composite nucleic acid sequence
 CC of human SCF cDNA, human SCF cDNA sequence obtained from HT1080
 CC fibrosarcoma cell line, or human SCF cDNA obtained from 5637 bladder
 CC carcinoma cell line (and having one or more of in vitro biological
 CC activity of naturally-occurring stem cell factor, and an antibody (Ab)
 CC specifically binding SCF. SCF is useful for treating leukopaemia,
 CC thrombocytopaenia, anaemia, and enhancing engraftment of bone marrow
 CC during transplantation in a mammal. SCF is useful enhancing bone marrow
 CC recovery in treatment of radiation, chemical, or chemotherapeutic induced
 CC bone marrow aplasia or myelosuppression which involves treating patients
 CC with therapeutically effective doses of SCF. SCF is useful for treating
 CC acquired immune deficiency, neoplasia, nerve damage, infertility,
 CC intestinal damage, and a myeloproliferative disorder. SCF is useful for

CC transfecting early haematopoietic progenitor cells with a gene which
 CC involves culturing early haematopoietic progenitor cells with SCF, and
 CC transfecting the cultured cells with a gene. SCF is useful for
 CC haematopoietic progenitor cells with SCF, transfecting the cultured cells
 CC with a gene, and administering the cultured cell to the mammal. SCF is
 CC useful for treating various haematopoietic disorders, aplastic anaemia,
 CC myelofibrosis, myelocytosis, osteopetrosis, metastatic carcinoma, acute
 CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's
 CC disease, Niemann-Pick disease, Diamond-Blackfan anaemia (DBA), Fanconi's
 CC anaemia. SCF is useful for enhancing the efficiency of gene therapy, for
 CC enhancing haematopoietic recovery after acute blood loss. The present
 CC sequence is a primer and/or probe used in the isolation of SCF nucleic
 CC acids.

XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
 Db 20 CTAAGAAAAA 1

RESULT 615

ID ADU17674
 ADU17674 standard; DNA; 20 BP.

AC ADU17674;

XX 27-JAN-2005 (first entry)

XX Thiol-modified oligo (SA20) to form oligo-nanoparticle conjugates.

XX Nucleic acid detection; genetic disease; cystic fibrosis;
 KW Duchenne muscular dystrophy; sickle cell anaemia; phenylketonuria;
 KW bacterial disease; tuberculosis; Lyme disease; viral disease;
 KW microbial infection; sexually transmitted disease; gonorrhoea; forensics;
 KW DNA sequencing; paternity testing; cell line authentication;
 KW gene therapy; ss.

XX Unidentified.

XX Key Location/Qualifiers
 FH modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Linked to hexylthiol group"

XX US2004219520-A1.

XX 04-NOV-2004.

XX 12-OCT-2001; 2001US-00976900.

XX 29-JUL-1996; 96US-0031809P.

XX 21-JUL-1997; 97WO-US012783.

XX 29-JAN-1999; 99US-00240755.

XX 23-JUN-1999; 99US-00344667.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JU, Elghanian R;

PI Taton TA;

XX WPI; 2004-783783/77.

XX Detection of nucleic acid by contacting nucleic acid with substrate
 PT including oligonucleotides, contacting nucleic acid bound to substrate

PT with nanoparticles comprising oligonucleotides, and detecting change in
 FT conductivity.

XX Example 18; SEQ ID NO 55; 110pp; English.

XX The present invention provides methods of detecting nucleic acids. The
 CC method of the invention comprises contacting a nucleic acid with a
 CC substrate including oligonucleotides under conditions to allow
 CC hybridisation of oligonucleotides on the substrate, contacting nucleic
 CC acid bound to the substrate with nanoparticles comprising
 CC oligonucleotides under hybridisation conditions and detecting change in
 CC conductivity. The invention is useful for detecting nucleic acids for the
 CC diagnosis of genetic diseases such as cystic fibrosis, Duchenne muscular
 CC dystrophy, sickle cell anaemia and phenylketonuria, bacterial diseases
 CC such as tuberculosis, Lyme disease, Helicobacter pylori infections,
 CC Escherichia coli infections, Legionella infections, Mycoplasma infections
 CC and Salmonella infections, viral diseases such as human immunodeficiency
 CC disease virus (HIV), hepatitis virus, herpes virus, cytomegalovirus and
 CC Epstein-Barr virus, sexually transmitted disease such as gonorrhoea. The
 CC invention is also useful in forensics, DNA sequencing, paternity testing,
 CC cell line authentication and gene therapy. The present sequence is a
 CC thiol-modified oligonucleotide used in the formation of oligonucleotide-
 CC nanoparticle conjugates. This oligonucleotide is used to detect the
 CC effect of coadsorbed diluent oligonucleotides.

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
 Db 1 AAAAAA 20

RESULT 616

ID ADU89876
 ADU89876 standard; DNA; 20 BP.

AC ADU89876;

XX 10-FEB-2005 (first entry)

XX Allergic response suppressor oligonucleotide #560.

XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

XX Synthetic.

XX US2004235774-A1.

XX 25-NOV-2004.

XX 23-APR-2004; 2004US-00831778.

XX 03-FEB-2000; 2000US-0179991P.

XX 02-FEB-2001; 2001US-00776479.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

XX (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

```

XX PS Disclosure; SEQ ID NO 560; 235pp; English.
XX CC
CC The invention relates to a method of suppressing a symptom of an allergic
CC response in a subject by administering a first and second dose of an
CC immunostimulatory nucleic acid that comprises a nucleotide sequence
CC comprising 5'-cg-3', and where the second dose is administered from 1 day
CC to 8 weeks after the first dose. The methods and compositions of the
CC present invention are useful for the treatment or prevention of asthma
CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
CC an immunostimulatory nucleic acid alone or in combination with other
CC medicaments. They can also be used in preventing bacterial and viral
CC infections. This sequence represents an oligonucleotide used in the
CC method of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
    Query Match          0.7%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 6.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 617
ADU89872/c
ID ADU89872 standard; DNA; 20 BP.
XX
XX AC ADU89872;
XX
XX DT 10-FEB-2005 (first entry)
XX
XX DE Allergic response suppressor oligonucleotide #556.
XX
XX KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
XX KW bacterial infection; viral infection.
XX
XX OS Synthetic.
XX
XX PN US2004235774-A1.
XX
XX PD 25-NOV-2004.
XX
XX PF 23-APR-2004; 2004US-00831778.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PR 02-FEB-2001; 2001US-00776479.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2004-833006/82.
XX
XX PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX PT dermatitis, in a subject, comprises administering a first and second dose
XX PT of an immunostimulatory nucleic acid.
XX
XX PS Disclosure; SEQ ID NO 556; 235pp; English.
XX
XX CC The invention relates to a method of suppressing a symptom of an allergic
XX CC response in a subject by administering a first and second dose of an
XX CC immunostimulatory nucleic acid that comprises a nucleotide sequence
XX CC comprising 5'-cg-3', and where the second dose is administered from 1 day
XX CC to 8 weeks after the first dose. The methods and compositions of the
XX CC present invention are useful for the treatment or prevention of asthma
XX CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX CC an immunostimulatory nucleic acid alone or in combination with other
XX CC medicaments. They can also be used in preventing bacterial and viral
XX CC infections. This sequence represents an oligonucleotide used in the
XX CC method of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
    Query Match          0.7%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 6.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

CC an immunostimulatory nucleic acid alone or in combination with other
CC medicaments. They can also be used in preventing bacterial and viral
CC infections. This sequence represents an oligonucleotide used in the
CC method of the invention.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
    Query Match          0.7%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 6.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 618
ADU89542/c
ID ADU89542 standard; DNA; 20 BP.
XX
XX AC ADU89542;
XX
XX DT 10-FEB-2005 (first entry)
XX
XX DE Allergic response suppressor oligonucleotide #226.
XX
XX KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
XX KW bacterial infection; viral infection.
XX
XX OS Synthetic.
XX
XX PN US2004235774-A1.
XX
XX PD 25-NOV-2004.
XX
XX PF 23-APR-2004; 2004US-00831778.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PR 02-FEB-2001; 2001US-00776479.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2004-833006/82.
XX
XX PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX PT dermatitis, in a subject, comprises administering a first and second dose
XX PT of an immunostimulatory nucleic acid.
XX
XX PS Disclosure; SEQ ID NO 226; 235pp; English.
XX
XX CC The invention relates to a method of suppressing a symptom of an allergic
XX CC response in a subject by administering a first and second dose of an
XX CC immunostimulatory nucleic acid that comprises a nucleotide sequence
XX CC comprising 5'-cg-3', and where the second dose is administered from 1 day
XX CC to 8 weeks after the first dose. The methods and compositions of the
XX CC present invention are useful for the treatment or prevention of asthma
XX CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX CC an immunostimulatory nucleic acid alone or in combination with other
XX CC medicaments. They can also be used in preventing bacterial and viral
XX CC infections. This sequence represents an oligonucleotide used in the
XX CC method of the invention.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
    Query Match          0.7%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 6.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 619
 ACL79852/c
 ID ACL79852 standard; DNA; 20 BP.
 XX
 AC ACL79852;
 XX
 DT 16-JUN-2005 (first entry)
 XX
 DE Oligo (dT)20 reverse transcription primer, SEQ:7389.
 XX
 KW Vaccine; nucleic acid vaccine; drug screening; diagnosis;
 KW SARS coronavirus infection; infection; respiratory disease; virucide;
 KW primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004092360-A2.
 XX
 PD 28-OCT-2004.
 XX
 PF 09-APR-2004; 2004WO-US011710.
 XX
 PR 10-APR-2003; 2003US-0462218P.
 PR 11-APR-2003; 2003US-046245P.
 PR 12-APR-2003; 2003US-0462418P.
 PR 13-APR-2003; 2003US-0462748P.
 PR 14-APR-2003; 2003US-0463109P.
 PR 15-APR-2003; 2003US-0463460P.
 PR 16-APR-2003; 2003US-0463668P.
 PR 17-APR-2003; 2003US-0463983P.
 PR 18-APR-2003; 2003US-0463971P.
 PR 22-APR-2003; 2003US-0464838P.
 PR 23-APR-2003; 2003US-0464899P.
 PR 24-APR-2003; 2003US-0465273P.
 PR 05-MAY-2003; 2003US-0465535P.
 PR 22-MAY-2003; 2003US-0468312P.
 PR 14-AUG-2003; 2003US-0473144P.
 PR 23-SEP-2003; 2003US-0505652P.
 PR 11-OCT-2003; 2003US-0510781P.
 PR 11-DEC-2003; 2003US-0529464P.
 PR 12-JAN-2004; 2004US-0536177P.
 PR 07-APR-2004; 2004US-0560757P.
 XX
 PA (CHIR) CHIRON CORP.
 XX
 PI Rappuoli R, Masignani V, Stadler K, Gregersen J, Chien D, Han J;
 PI Polo J, Weiner A, Houghton M, Song HC, Seo MY, Donnelly JJ;
 PI Klenk HD, Valliante N;
 XX
 DR WPI; 2004-766863/75.
 XX
 PT Novel isolated polypeptide e.g. spike polypeptide, Env polypeptide, of
 PT severe acute respiratory syndrome virus (SARS), useful as vaccine for
 PT SARS.
 XX
 PS Example 1; SEQ ID NO 7389; 839pp; English.
 XX
 CC The invention relates to isolated polypeptides of the severe acute
 CC respiratory syndrome (SARS) coronavirus. The polypeptides include spike
 CC (S or E2), env (E or sM), membrane (M or E1), hemagglutinin-esterase (HE
 CC or E3), and nucleocapsid (N) polypeptides, and the ORF1a and ORF1ab
 CC (replicase) polypeptides and their proteolytic fragments. The invention
 CC also relates to antibodies which recognise the polypeptides; nucleic
 CC acids encoding the SARS virus polypeptides; primers specific for SARS
 CC virus nucleic acid sequences; kits for amplifying SARS virus target
 CC nucleic acids; a double-stranded RNA molecule 10-30 nucleotides in length

CC which is able to inactivate the SARS virus in a mammalian cell; an
 CC expression construct for recombinant expression of a SARS virus spike
 CC protein; a viral vector for in vivo delivery of a SARS virus polypeptide-
 CC encoding nucleic acid; and a mammalian cell line stably expressing a SARS
 CC viral antigen. The invention additionally provides a vaccine for the
 CC treatment or prevention of SARS comprising an inactivated SARS virus, a
 CC killed SARS virus, an attenuated SARS virus, a split SARS virus
 CC making inactivated SARS virus and vaccines containing it; an alpha-virus
 CC replicon particle comprising one or more SARS viral antigens; and a
 CC vaccine comprising one or more SARS virus antigens and one or more
 CC respiratory virus antigens. The invention further encompasses a method of
 CC identifying a therapeutically active agent by measuring the effect of the
 CC agent on a SARS-related enzyme, and a method of treating a SARS patient
 CC using small molecule viral inhibitors. The SARS virus polypeptides and
 CC nucleic acids can be used in the preparation and manufacture of vaccines
 CC for the treatment or prevention of SARS. The SARS virus polypeptides,
 CC antibodies against them, and SARS virus-specific primers and kits
 CC containing them are useful for diagnosing or identifying the presence of
 CC SARS in a biological sample. The present sequence represents a primer for
 CC use in reverse transcription of SARS genomic RNA. Note: The sequence data
 CC for this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7% Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 620

ADU50993

ID ADU50993 standard; DNA; 20 BP.

AC ADU50993;

XX

DT 13-JAN-2005 (first entry)

XX

DE Oligonucleotide of the invention SEQ ID NO:55.

XX ss; hybridization; diagnosis; genetic disorder; bacterial infection;

KW viral infection.

XX Synthetic.

OS

PN US6812334-B1.

XX

PD 02-NOV-2004.

XX

PF 12-OCT-2001; 2001US-00976618.

XX

PR 29-JUL-1996; 96US-0031809P.

XX

PR 21-JUL-1997; 97WO-US012783.

XX

PR 29-JAN-1999; 99US-00240755.

XX

PR 25-JUN-1999; 99US-00344667.

XX

PR 26-APR-2000; 2000US-0200161P.

XX

PR 26-JUN-2000; 2000US-00603830.

XX

PA (NANO-) NANOSPHERE INC.

XX

PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

XX

PI Taton TA;

XX

XX WPI; 2005-019280/02.

XX

PT Nanoparticle for detecting nucleic acids for diagnosis of genetic,

PT bacterial, and viral diseases, comprises oligonucleotides containing at

PT least one type of recognition oligonucleotides, each having spacer
PT portion and recognition portion.
XX
PS Example 18; SEQ ID NO 55; 108pp; English.
XX
CC The invention relates to a novel nanoparticle having oligonucleotides
CC attached thereto, comprising at least one type of recognition
CC oligonucleotides, each having a spacer portion bound to the nanoparticle
CC and a recognition portion having a sequence complementary to portion(s)
CC of sequence of nucleic acid or another oligonucleotide. In the presence
CC of nucleic acid or another oligonucleotide and under hybridization
CC conditions, the nanoparticle forms a complex with the nucleic acid or
CC another oligonucleotide. The complex has a sharp melting profile and an
CC increased melting temperature, relative to a melting profile and a
CC melting temperature of an analogous complex formed with the nucleic acid
CC or another oligonucleotide and an unlabeled or fluorophore-labeled
CC oligonucleotide having a sequence identical to the oligonucleotides bound
CC to the nanoparticle, to allow for selective discrimination of nucleotide
CC insertions, deletions, and/or mismatches in the nucleic acid or another
CC oligonucleotide under stringent hybridization conditions. The
CC nanoparticle is a metal, semiconductor, or preferably a gold
CC nanoparticle. The nanoparticles of the invention are useful for detecting
CC nucleic acids for diagnosis of genetic, bacterial, and viral diseases.
CC The nanoparticle is stable at elevated temperature and high salt
CC concentration. The present sequence is used in the exemplification of the
CC invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 621
ADV94811
ID ADV94811 standard; DNA; 20 BP.
XX
AC ADV94811;
XX
XX 10-MAR-2005 (first entry)
XX Human glycosyltransferase pENTR/DTOPO vector 5' primer.
XX
DE glycosyltransferase; N-acetyl-D-galactosamine; GalNAC; screening; ss;
KW PCR; primer.
XX
OS Synthetic.
XX
XX JP2004357635-A.
XX
XX 24-DEC-2004.
XX
XX 06-JUN-2003; 2003JP-00162685.
XX
XX 06-JUN-2003; 2003JP-00162685.
XX
XX (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
PA (SEKG) SEIKAGAKU KOGYO CO LTD.
XX
XX WPI; 2005-035730/04.
XX
XX Novel glycosyltransferase capable of transferring N-acetyl-D-
PT galactosamine (GalNAC) residue to GalNAC receptor substrate from GalNAC
PT donor substrate, useful in screening substances that promotes/inhibits
PT glycosyltransferase activity.
XX
PS Example 1; SEQ ID NO 5; 37pp; Japanese.
XX

CC The invention relates to a novel glycosyltransferase capable of
CC transferring an N-acetyl-D-galactosamine (GalNAC) residue to a GalNAC
CC receptor substrate from a GalNAC donor substrate. The glycosyltransferase
CC comprises a polypeptide having sequence ADV94808 containing amino acids
CC 43-601 or 1-601 of a fully defined sequence of 601 amino acids, as given
CC in the specification, or ADV94808 in which one or more amino acids are
CC substituted, deleted, inserted or rearranged. The invention further
CC comprises: a nucleic acid encoding the 601 amino acid glycosyltransferase
CC protein and comprising a sequence ADV94807 having bases 127-1806 or 1-
CC 1806 of a fully defined sequence of 1806 base pairs, as given in the
CC specification, or a sequence complementary to ADV94807; a nucleic acid
CC capable of hybridizing under stringent conditions, with the nucleic acid
CC that consists of the base sequence complementary to the 1806 bp
CC polynucleotide; a vector containing the glycosyltransferase encoding DNA
CC or its complementary sequence; a recombinant containing the vector; an
CC antibody capable of specifically recognizing the glycosyltransferase
CC protein; an active regulator of the glycosyltransferase protein; and a
CC therapeutic agent of the disease caused due to change of activity of the
CC glycosyltransferase, containing an active regulator of the
CC glycosyltransferase protein as an active ingredient. The
CC glycosyltransferase protein is useful in screening substances that
CC promote or inhibit the activity of glycosyltransferase. The
CC glycosyltransferase complementary DNA is useful as a probe for detecting
CC in vivo expression of the glycosyltransferase DNA, and as a reagent or
CC diagnostic for medical studies. The active regulator of the
CC glycosyltransferase protein, is useful as the therapeutic agent for
CC treating the disease caused due to change of activity of the
CC glycosyltransferase protein. The glycosyltransferase protein is capable
CC of transferring GalNAC residue to a GalNAC receptor substrate from a
CC GalNAC donor substrate. This polynucleotide sequence represents a primer
CC used in the exemplification of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 622
ADM02146
ID ADM02146 standard; DNA; 20 BP.
XX
AC ADM02146;
XX
XX 24-MAR-2005 (first entry)
XX
XX Target RNA detecting detection probe.
XX
XX Gene expression; DNA detection; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= a
FT /mod_base= other
FT /note= "5'-steroid disulfide linker"
XX
XX WO2005001143-A2.
XX
XX 06-JAN-2005.
XX
XX 27-FEB-2004; 2004WO-US006273.
XX
XX 27-FEB-2003; 2003US-0450268P.
XX
XX (NANO-) NANOSPHERE INC.
XX

```

PI Bao YP, Mueller UR;
XX WPI; 2005-075590/08.
XX
PT Detecting/quantifying gene expression in a sample of unlabeled target
PT nucleic acids by contacting the sample, a substrate having capture
PT nucleic acid sequences and nanoparticles having bound oligonucleotides
PT for hybridization.
XX
XX Example 1; Page 28; 54pp; English.
XX
XX The invention relates to detecting or quantifying gene expression in a
XX sample having unlabeled target nucleic acids. The method involves
XX providing a substrate having types of capture nucleic acid sequences
XX attached to it in an array for the detection of multiple portions of a
XX target nucleic acid, the detection of multiple different target nucleic
XX acids, or both; providing nanoparticles having oligonucleotides bound to
XX it, the oligonucleotides bound to the nanoparticles having a sequence
XX that is complementary to at least a portion of the oligonucleotide tail;
XX contacting the sample, the substrate, and the nanoparticles, the
XX nucleic acids to the capture nucleic acid sequences bound to the
XX substrate and hybridization of the target nucleic acids to the
XX nanoparticles, and observing a detectable change. The target cDNAs,
XX nanoparticles and substrate are contacted simultaneously under conditions
XX effective for hybridization of the target cDNAs with the oligonucleotides
XX bound to the nanoparticles and with the capture nucleic acid sequences
XX bound to the substrate. The nanoparticles are made of gold. The capture
XX nucleic acid sequences comprise an oligonucleotide, cDNA, or genomic
XX sequence fragment. The method is useful for detecting/quantifying global
XX gene expression in a sample of unlabeled target nucleic acids. The method
XX avoids the problems associated with fluorescent labeling and target
XX amplification. The present sequence represents a detection probe that can
XX be used to detect target RNA sequences. The probe comprise a steroid
XX disulfide linker at the 5'-end followed by a recognition sequence.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAA 20
XX
RESULT 623
ADW02147/c
XX ID ADW02147 standard; DNA; 20 BP.
XX AC ADW02147;
XX
DT 24-MAR-2005 (first entry)
XX
DE Target RNA detecting detection probe.
XX
KW Gene expression; DNA detection; probe; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= other
FT /note= "5'-steroid disulfide linker"
XX
XX WO2005001143-A2.
XX
XX 06-JAN-2005.
XX
XX 27-FEB-2004; 2004WO-US0006273.
XX

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PR 27-FEB-2003; 2003US-0450268P.
XX (NANO-) NANOSPHERE INC.
XX
XX Bao YP, Mueller UR;
XX WPI; 2005-075590/08.
XX
XX Detecting/quantifying gene expression in a sample of unlabeled target
XX nucleic acids by contacting the sample, a substrate having capture
XX nucleic acid sequences and nanoparticles having bound oligonucleotides
XX for hybridization.
XX
XX Example 1; Page 28; 54pp; English.
XX
XX The invention relates to detecting or quantifying gene expression in a
XX sample having unlabeled target nucleic acids. The method involves
XX providing a substrate having types of capture nucleic acid sequences
XX attached to it in an array for the detection of multiple portions of a
XX target nucleic acid, the detection of multiple different target nucleic
XX acids, or both; providing nanoparticles having oligonucleotides bound to
XX it, the oligonucleotides bound to the nanoparticles having a sequence
XX that is complementary to at least a portion of the oligonucleotide tail;
XX contacting the sample, the substrate, and the nanoparticles, the
XX nucleic acids to the capture nucleic acid sequences bound to the
XX substrate and hybridization of the target nucleic acids to the
XX nanoparticles, and observing a detectable change. The target cDNAs,
XX nanoparticles and substrate are contacted simultaneously under conditions
XX effective for hybridization of the target cDNAs with the oligonucleotides
XX bound to the nanoparticles and with the capture nucleic acid sequences
XX bound to the substrate. The nanoparticles are made of gold. The capture
XX nucleic acid sequences comprise an oligonucleotide, cDNA, or genomic
XX sequence fragment. The method is useful for detecting/quantifying global
XX gene expression in a sample of unlabeled target nucleic acids. The method
XX avoids the problems associated with fluorescent labeling and target
XX amplification. The present sequence represents a detection probe that can
XX be used to detect target RNA sequences. The probe comprise a steroid
XX disulfide linker at the 5'-end followed by a recognition sequence.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 624
ADV86470/c
XX ID ADV86470 standard; DNA; 20 BP.
XX AC ADV86470;
XX
DT 24-MAR-2005 (first entry)
XX
DE Fluorophore-labeled biological detection oligonucleotide #3.
XX
KW fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX
OS Synthetic.
XX
XX US6838244-B1.
XX
XX 04-JAN-2005.
XX
XX 18-MAY-2001; 2001US-00859736.
XX
XX 19-MAY-2000; 2000US-0205452P.
XX

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PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX LI WR, Zhou JS;
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
XX for detecting biological molecules e.g., antibody, antigen, avidin or
XX protein.
XX
XX Example 1; SEQ ID NO 3; 18pp; English.
XX
XX The invention relates to an oligonucleotide molecule (ON) labeled with
XX several fluorophores of one or more types embedded in its backbone, where
XX one or more of the fluorophores is not located at either the 3' or 5'
XX terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX useful for detecting biological molecules e.g., antibody, antigen,
XX avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is
XX capable of providing strong fluorescence signals at different
XX wavelengths. This sequence corresponds to an example of an
XX oligonucleotide of the invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 625
ADV86471/C
ID ADV86471 standard; DNA; 20 BP.
XX
XX ADV86471;
XX
XX 24-MAR-2005 (first entry)
XX
XX Fluorophore-labeled biological detection oligonucleotide #4.
XX
XX fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX
XX Synthetic.
XX
XX US6838244-B1.
XX
XX 04-JAN-2005.
XX
XX 18-MAY-2001; 2001US-00859736.
XX
XX 19-MAY-2000; 2000US-0205452P.
XX
XX (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX LI WR, Zhou JS;
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
XX for detecting biological molecules e.g., antibody, antigen, avidin or
XX protein.
XX
XX Example 1; SEQ ID NO 4; 18pp; English.
XX
XX The invention relates to an oligonucleotide molecule (ON) labeled with
XX several fluorophores of one or more types embedded in its backbone, where
XX one or more of the fluorophores is not located at either the 3' or 5'
XX terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX useful for detecting biological molecules e.g., antibody, antigen,
XX avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is

```

```

CC capable of providing strong fluorescence signals at different
CC wavelengths. This sequence corresponds to an example of an
CC oligonucleotide of the invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 626
ADM44957/C
ID ADM44957 standard; DNA; 20 BP.
XX
XX ADM44957;
XX
XX 07-APR-2005 (first entry)
XX
XX Human taxane discriminating EST related PCR primer SEQ ID NO 149.
XX
XX PCR; primer; ss; taxane; breast cancer; neoplasm; Cytostatic.
XX
XX Homo sapiens.
XX
XX WO2005003352-A1.
XX
XX 13-JAN-2005.
XX
XX 01-JUL-2004; 2004WO-JP009692.
XX
XX 01-JUL-2003; 2003JP-00270176.
XX
XX (TAIS ) TAISHO PHARM CO LTD.
XX
XX (KATO/) KATO K.
XX
XX (NOGU/) NOGUCHI S.
XX
XX Kato K, Noguchi S, Koizumi K;
XX WPI; 2005-101490/11.
XX
XX Discriminating responsiveness of individual to taxanes, by detecting
XX expression of 10 or more genes e.g., U43578, M33882, U22944 in sample
XX derived from individual and determining responsiveness of sample based on
XX detection results.
XX
XX Example 4; SEQ ID NO 149; 121pp; Japanese.
XX
XX The invention relates to a method of discriminating the responsiveness of
XX an individual to taxanes. The method is useful for discriminating the
XX responsiveness of an individual e.g. a breast cancer patient to taxanes,
XX where the sample is a primary breast cancer tissue or local recurrent
XX breast cancer tissue. The method discriminates the responsiveness of a
XX patient with respect to taxane and thus contributes to the treatment of
XX cancer. The present sequence represents a taxane discriminating expressed
XX sequence tag, EST, related DNA.
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1751 CTGTTCTGTGTACCCAGAGGA 1770
DB 20 CTGTTCTGTGTACCCAGAGGA 1

RESULT 627

```


ADW93078/c
 ID ADW93078 standard; DNA; 20 BP.
 XX
 AC ADW93078;
 XX
 DT 21-APR-2005 (first entry)
 XX
 DE Universal Stem Cell Factor PCR primer 220-7, SEQ ID 33.
 XX
 KW Antianemic; Antimetabolic; Cytostatic; Anti-HIV; Cardiovascular-Gen.;
 CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive;
 KW Antiinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia;
 KW paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia;
 KW multiple myeloma; hodgkins disease; lymphoma; gauchers disease;
 KW niemann pick disease; sarcoidosis; plasmiodium infection;
 KW vitamin deficiency; hypopigmentation; vitiligo; infertility;
 KW chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR;
 KW primer; ss.
 XX
 OS Synthetic.
 XX
 XX US6852313-B1.
 XX
 XX 08-FEB-2005.
 XX
 XX 26-JUN-2000; 2000US-00604325.
 XX
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449649.
 XX
 XX (ANGE-) AMGEN INC.
 XX
 XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX WPI; 2005-160562/17.
 XX
 XX Stimulating proliferation of melanocyte cells in human, involves
 PT administering stem cell factor polypeptide or its biologically active
 PT fragments stimulating growth of melanocyte cells, and optionally carrier,
 PT to human.
 XX
 XX Example 3; SEQ ID NO 33; 212pp; English.
 XX
 CC The present invention relates to a method (M1) for stimulating
 CC proliferation of melanocyte cells in a human. (M1) involves administering
 CC a Stem Cell Factor (SCF) protein, or its biologically active fragments
 CC that stimulates growth of melanocyte cells, and optionally a carrier, to
 CC the human. The SCF is covalently conjugated to a water soluble polymer
 CC e.g. polyethylene glycol. Also, the SCF is co-administered with one or
 CC more other cytokines. SCF is also able to stimulate the growth of
 CC primitive progenitors such as early hematopoietic progenitor cells that
 CC are capable of maturing to erythroid, megakaryocyte, granulocyte,
 CC lymphocyte and macrophage cells, and non-hematopoietic stem cells, such as
 CC neural stem cells and primordial germ stem cells. (M1) is useful in
 CC accelerating bone marrow regeneration, and in augmenting T cell
 CC production. (M1) is useful for treating stem cells disorders that are
 CC characterized by a reduction in functional marrow mass due to toxic,
 CC radiant or immunological injury. (M1) is useful in treating AIDS,
 CC aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
 CC myeloclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
 CC multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, Niemann
 CC -Pick disease, congestive splenomegaly, Kalaazar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, fulminating
 CC septicemia, malaria, vitamin B12 and folic acid deficiency disease,
 CC pyridoxine deficiency disease, and hypopigmentation disorders such as
 CC piebaldism and vitiligo. (M1) is useful in treating infertility states,
 CC intestinal damage resulting from irradiation or chemotherapy, and stem

CC cell myeloproliferative disorders such as chronic myelogenous leukemia,
 CC primary thrombocythemia and acute leukemia. (M1) is useful in expanding
 CC early hematopoietic progenitors in syngeneic, allogeneic or autologous
 CC bone marrow transplantation, and in enhancing the efficacy of gene
 CC therapy. The present sequence is a PCR primer used in an example from the
 CC invention for cloning SCF.
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 628
 ADY86103/c
 ID ADY86103 standard; DNA; 20 BP.

XX AC ADY86103;

XX DT 02-JUN-2005 (first entry)

XX DE dt(20) primer used in cDNA synthesis.

XX KW Genetic engineering; transgenic plant; ss; primer.

XX OS Unidentified.

XX PN US2005066389-A1.

XX XX 24-MAR-2005.

XX XX 23-JUN-2004; 2004US-00876086.

XX XX 23-JUN-2003; 2003US-0480960P.

XX XX (REGC) UNIV CALIFORNIA.

XX XX Gallie DR, Young TE;

XX XX WPI; 2005-241338/25.

XX PT New nucleic acid, e.g. 1-Aminocyclopropane-1-Carboxylate oxidase or
 XX PT ethylene insensitive, useful for producing green leaves in maize plants.

XX PS Example; SEQ ID NO 49; 63pp; English.

XX CC The present invention relates to the Zea mays 1-Aminocyclopropane-1-
 CC Carboxylate (ACC) oxidase, ACC synthase, ACC deaminase, ethylene response
 CC sensor (ERS), ethylene resistant (ETR) and ethylene insensitive (EIN)
 CC proteins and their DNA. The invention is useful in plant genetic
 CC engineering for producing green leaves in maize plants. The present
 CC sequence is the dt(20) primer used in ACC oxidase, ACC synthase, ACC
 CC deaminase, ERS, ETR and EIN cDNA synthesis.

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 629
 ADZ47530/c
 ID ADZ47530 standard; DNA; 20 BP.

```

XX AC ADZ47530;
XX DT
XX DE
XX DE 30-JUN-2005 (first entry)
XX DE Universal PCR primer, 220-7, SEQ ID NO: 33.
XX DE
XX DE Stem cell factor; cell growth; immune disorder; immunomodulator;
KW genetic disorder; hematological disease; antianemic; cancer; cytostatic;
KW neoplasm; neurological disease; neuroprotective; infection;
KW antimicrobial; hypopigmentation; dermatological; infertility;
KW antiinfertility; inflammation; antiinflammatory; gene therapy; PCR;
KW primer; ss.
XX OS
XX OS Unidentified.
XX PN
XX PN US2005080250-A1.
XX PD
XX PD 14-APR-2005.
XX PF
XX PF 16-JUL-2003; 2003US-00620642.
XX PR
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PR 07-JUN-1995; 95US-00486546.
XX PR 07-AUG-2000; 2000US-00635249.
XX PR 19-JUN-2002; 2002US-00175608.
XX
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2005-321855/33.
XX
XX Stimulating growth of stromal cells for treating AIDS or severe combined
PT immunodeficiency states in human, primary splenic pancytopenia, milary
PT tuberculosis, by administering human stem cell factor polypeptide and
PT carrier to human.
XX
XX Example 3; SEQ ID NO 33; 216pp; English.
XX
XX The present invention relates to a method of stimulating growth of
CC stromal cells in a human. The method involves administering to the human
CC an effective amount of a human stem cell factor (SCF) polypeptide and
CC optionally a pharmaceutically acceptable carrier. The invention is useful
CC for treating immune disorders such as (acquired immune deficiency
CC syndrome, severe combined immunodeficiency), genetic disorder (such as
CC niemann pick disease), hematological diseases (such as multiple myeloma,
CC hodgkins disease, spleen disease, anemia), cancers (such as acute
CC leukemia, lymphoma), neurological disease (such as niemann pick disease),
CC infection (such as Leishmania donovani infection), hypopigmentation
CC disorders (such as piebaldism and vitiligo), in the treatment of
CC infertility states and for treating intestinal damage resulting from
CC irradiation or chemotherapy and inflammation (such as sarcoidosis). The
CC invention is also useful in gene therapy and SCF therapy. The present
CC sequence is an universal PCR primer. This primer is used in the cloning
CC of rat and human SCF cDNA.
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DE

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Db 20 CTAAGAAAAA 1
RESULT 630
AEA01023/c
ID AEA01023 standard; DNA; 20 BP.
XX AC AEA01023;
XX DT 28-JUL-2005 (first entry)
XX DE Synthetic RT-PCR primer.
XX KW DNA amplification; RT-PCR; primer; ss; reverse transcriptase PCR.
XX OS Synthetic.
XX PN WO2005045073-A1.
XX PD 19-MAY-2005.
XX PF 10-NOV-2003; 2003WO-KR002407.
XX PR 10-NOV-2003; 2003WO-KR002407.
XX PA (SEEG-) SERGENE INC.
XX PI Chun J;
XX DR WPI; 2005-366849/37.
XX PT Amplifying unknown nucleotide sequence adjacent to known nucleotide
PT sequence, involves performing primary amplification of unknown nucleotide
PT sequence using DNA walking annealing control primer and first target-
PT specific primer.
XX Example 3; SEQ ID NO 27; 66pp; English.
XX
XX The invention relates to a method of amplifying an unknown nucleotide
CC sequence adjacent to a known nucleotide sequence, comprising performing a
CC primary amplification of the unknown nucleotide sequence using a DNA
CC walking annealing control primer and a first target-specific primer by
CC performing a first- and second-stage amplification of the unknown
CC nucleotide sequence. The invention also relates to a DNA walking
CC annealing control primer for amplifying an unknown nucleotide sequence
CC adjacent to a known nucleotide sequence a kit for carrying out the
CC method, comprising a DNA walking annealing control primer. The method is
CC useful for amplifying an unknown nucleotide sequence adjacent to a known
CC nucleotide sequence. The method exhibits improved annealing specificity,
CC due to the presence of a DNA walking annealing control primer. This
CC sequence represents a synthetic RT-PCR primer of the invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAA 2728
Db 20 AAAAAA 1
RESULT 631
ADZ97999/c
ID ADZ97999 standard; DNA; 20 BP.
XX AC ADZ97999;
XX DT 28-JUL-2005 (first entry)
XX DE Human antisense oligonucleotide SEQ ID NO:153.
DE

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```
XX KW protein interaction; antisense oligonucleotide; ss.
XX OS Homo sapiens.
XX PN US2005112118-A1.
XX XX 26-MAY-2005.
XX PD
XX XX 20-OCT-2003; 2003US-00690276.
XX PF 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 19-MAR-2001; 2001US-0276179P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035343.
XX PR 14-JAN-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX PA (MYRI-) MYRIAD GENETICS INC.
XX PI
XX PI Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX DR WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX PT -regulated kinase 3) by administering modulating compound.
XX PS Disclosure; SEQ ID NO 153; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
XX CC the present invention examples of antisense oligonucleotides specific to
XX CC nucleic acids encoding individual proteins in tables 1 to 82 are provided
XX CC in SEQ ID NOS:11-223 (ADZ97857-ADZ98069).
XX XX
XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 647 GTAGCCACATGTCAGGGTG 666
DB 20 GTAGCCACATGTCAGGGTG 1
RESULT 632
ADZ98001/c
ID ADZ98001 standard; DNA; 20 BP.
```

```
XX AC ADZ98001;
XX DT 28-JUL-2005 (first entry)
XX DE Human antisense oligonucleotide SEQ ID NO:155.
XX KW protein interaction; antisense oligonucleotide; ss.
XX OS Homo sapiens.
XX PN US2005112118-A1.
XX PD 26-MAY-2005.
XX PF 20-OCT-2003; 2003US-00690276.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 19-MAR-2001; 2001US-0276179P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035343.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX XX
XX PA (MYRI-) MYRIAD GENETICS INC.
XX XX
XX PI Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX XX WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX PT -regulated kinase 3) by administering modulating compound.
XX PS Disclosure; SEQ ID NO 155; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
XX CC the present invention examples of antisense oligonucleotides specific to
XX CC nucleic acids encoding individual proteins in tables 1 to 82 are provided
XX CC in SEQ ID NOS:11-223 (ADZ97857-ADZ98069).
XX XX
XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 643 AGCAGTAGCCACATGTCAG 662
|||||
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```
Db      20 AGCAGTAGCCACATGTCAG 1
RESULT 633
ADZ98000/c
ID      ADZ98000 standard; DNA; 20 BP.
XX
AC      ADZ98000;
XX
XX      28-JUL-2005 (first entry)
DT
XX
DE      Human antisense oligonucleotide SEQ ID NO:154.
XX
XX      protein interaction; antisense oligonucleotide; ss.
XX
XX      Homo sapiens.
OS
XX
XX      US2005112118-A1.
PN
XX
XX      26-MAY-2005.
PD
XX
XX      20-OCT-2003; 2003US-00690276.
XX
XX      02-DEC-1999; 99US-0168377P.
XX
XX      02-DEC-1999; 99US-0168379P.
XX
XX      25-FEB-2000; 2000US-0185056P.
XX
XX      01-DEC-2000; 2000US-00727384.
XX
XX      14-DEC-2000; 2000US-0255063P.
XX
XX      21-DEC-2000; 2000US-0256986P.
XX
XX      04-JAN-2001; 2001US-0259571P.
XX
XX      04-JAN-2001; 2001US-0259572P.
XX
XX      15-MAR-2001; 2001US-0276179P.
XX
XX      19-MAR-2001; 2001US-0277013P.
XX
XX      23-JUL-2001; 2001US-0307233P.
XX
XX      14-DEC-2001; 2001US-00014814.
XX
XX      21-DEC-2001; 2001US-00024599.
XX
XX      04-JAN-2002; 2002US-00035343.
XX
XX      04-JAN-2002; 2002US-00035344.
XX
XX      14-MAR-2002; 2002US-00099924.
XX
XX      18-MAR-2002; 2002US-00100503.
XX
XX      (MYRI-) MYRIAD GENETICS INC.
XX
XX      Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX
XX      WPI; 2005-371623/38.
XX
XX      Modulating, in a host cell, a protein-protein interaction between first
XX      protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX      -regulated kinase 3) by administering modulating compound.
XX
XX      Disclosure; SEQ ID NO 154; 296pp; English.
XX
XX      The invention relates to a method for modulating, in a host cell, a
XX      protein-protein interaction between a first protein which is PRAK (P38-
XX      regulated/activated protein kinase or MAPKAPK5) and a second protein
XX      which is ERK3 (extracellular signal-regulated kinase 3). The method
XX      comprises administering to the cell a compound capable of modulating the
XX      protein-protein interaction. The method is useful in modulating in a host
XX      cell a protein-protein interaction between a first protein which is PRAK
XX      and a second protein which is ERK3 for treating inflammation or
XX      inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX      chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX      ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX      inflammatory disease, systemic lupus erythematosus, rhinitis,
XX      conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX      Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
XX      the present invention examples of antisense oligonucleotides specific to
XX      nucleic acids encoding individual proteins in tables 1 to 82 are provided
XX      in SEQ ID NOS:11-223 (ADZ97857-ADZ98069).
XX
XX      Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      645 CAGTAGCCACATGTCAGGG 664
Db      20 CAGTAGCCACATGTCAGGG 1
XX
XX
XX
XX      25-AUG-2005 (first entry)
DT
XX
XX      Nucleic analysis 20-mer Thymine oligo.
DE
XX
XX      DNA detection; biochip; hybridization; ss.
XX
XX      Synthetic.
XX
XX      WO2005054458-A1.
XX
XX      16-JUN-2005.
XX
XX      03-DEC-2003; 2003WO-JP015490.
XX
XX      03-DEC-2003; 2003WO-JP015490.
XX
XX      (HITA-) HITACHI HIGH TECHNOLOGIES CORP.
XX
XX      Kajiyama T, Takahashi S;
XX
XX      WPI; 2005-425411/43.
XX
XX      Analyzing nucleic acid by performing amplification and individual
XX      detection of nucleic acid in chip having reaction layers for
XX      accommodating sample and reagent, and portions capable of controlling
XX      temperature conditions.
XX
XX      Disclosure; SEQ ID NO 1; 50pp; Japanese.
XX
XX      The invention relates to a novel method for analyzing a nucleic acid. The
XX      method involves performing amplification and individual detection of a
XX      nucleic acid in a chip having several reaction layers for accommodating
XX      samples and reagents, to enable specific hybridization of the target
XX      nucleic acid and portions capable of controlling temperature conditions
XX      for amplification and detection of the nucleic acid. The invention
XX      further comprises a nucleic acid analyzer consisting of the chip as
XX      mentioned in the method, and a temperature control unit for performing
XX      hybridization for performing nucleic acid detection. The method enables
XX      processing for performing nucleic acid detection. The method enables
XX      convenient, cost-effective and highly accurate analysis of a nucleic
XX      acid. This sequence represents an oligo used in the nucleic acid
XX      analyzing method of the invention.
XX
XX      Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db      20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX
XX
XX
XX      RESULT 635
XX      AEB28251/c
XX      ID      AEB28251 standard; DNA; 20 BP.
XX
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```

AC AEB28251;
XX
DT 22-SEP-2005 (first entry)
XX
DE Oligonucleotide 100T-PTO.
XX
KW cosmetics; pharmaceutical; skin allergy; dermatological;
KW dermatological disease; antiinflammatory; antiallergic; aging; eczema;
KW alopecia; epidermolysis bullosa; graft rejection; periodontal disease;
KW psoriasis; antipsoriatic; sunburn; vitiligo; inflammation; detergent;
KW dye; pigment; ss; primer; phosphorothioate; phosphodiester.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate or phosphodiester linkages"
XX
PN WO2005063300-A2.
XX
PD 14-JUL-2005.
XX
PF 14-DEC-2004; 2004WO-EP014195.
XX
PR 23-DEC-2003; 2003DE-01061502.
XX
PA (PHEN-) PHENION GMBH & CO KG.
XX
PI Kippenberger S, Kaufmann R, Bernd A, Bock A;
XX
DR WPI; 2005-512612/52.
XX
PT Cosmetic or pharmaceutical composition for treating epithelial covering
PT tissue comprises superstructure-forming nucleic acid sequences.
XX
PS Disclosure; SEQ ID NO 2; 7lpp; German.
XX
CC This invention represents a novel cosmetic or pharmaceutical composition
CC for treating epithelial covering tissue which comprises superstructure-
CC forming nucleic acid sequences. The composition can also be used in
CC fabric softeners, hand-washing products, body and hair care products,
CC hair dyes or manual dishwashing products. The superstructures are G
CC quadruplexes, frayed wires or i motifs. The sequences are 30-40
CC nucleotides long, have five or more C, G or I nucleotides in tandem, no
CC CpG motifs, no nonmethylated CG dinucleotides, are polyI, polyc or polyG
CC homopolymers and are optionally modified by replacing phosphodiester
CC linkages with methylphosphonate, phosphoramidate, phosphorothioate or
CC hydroxylamine linkages, by replaced ribose with other hexo- or
CC pentopyranoses or 3',5'-carbocyclically bridged 2'-deoxyribose
CC derivatives. The nucleic acid sequences are contained in liposomes. The
CC composition is useful for preventing or treating inflammatory changes to
CC epithelial covering tissue, including changes caused by pathogens,
CC autoimmune reactions, tumor necrosis factor, toxins and irritants,
CC especially aging processes, psoriasis, atopic eczema, dry skin, alopecia
CC areata, vitiligo, bullous diseases, rejection reactions, sunburn and
CC parodontosis. This sequence represents a phosphorothioate or
CC phosphodiester oligonucleotide used to illustrate the method of the
CC invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

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RESULT 636
AEB28250
XX AEB28250 standard; DNA; 20 BP.
XX
AC AEB28250;
XX
XX 22-SEP-2005 (first entry)
XX
DE Oligonucleotide 100A-PTO.
XX
KW cosmetics; pharmaceutical; skin allergy; dermatological;
KW dermatological disease; antiinflammatory; antiallergic; aging; eczema;
KW alopecia; epidermolysis bullosa; graft rejection; periodontal disease;
KW psoriasis; antipsoriatic; sunburn; vitiligo; inflammation; detergent;
KW dye; pigment; ss; primer; phosphorothioate; phosphodiester.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate or phosphodiester linkages"
XX
PN WO2005063300-A2.
XX
PD 14-JUL-2005.
XX
PF 14-DEC-2004; 2004WO-EP014195.
XX
PR 23-DEC-2003; 2003DE-01061502.
XX
PA (PHEN-) PHENION GMBH & CO KG.
XX
PI Kippenberger S, Kaufmann R, Bernd A, Bock A;
XX
DR WPI; 2005-512612/52.
XX
PT Cosmetic or pharmaceutical composition for treating epithelial covering
PT tissue comprises superstructure-forming nucleic acid sequences.
XX
PS Disclosure; SEQ ID NO 1; 7lpp; German.
XX
CC This invention represents a novel cosmetic or pharmaceutical composition
CC for treating epithelial covering tissue which comprises superstructure-
CC forming nucleic acid sequences. The composition can also be used in
CC fabric softeners, hand-washing products, body and hair care products,
CC hair dyes or manual dishwashing products. The superstructures are G
CC quadruplexes, frayed wires or i motifs. The sequences are 30-40
CC nucleotides long, have five or more C, G or I nucleotides in tandem, no
CC CpG motifs, no nonmethylated CG dinucleotides, are polyI, polyc or polyG
CC homopolymers and are optionally modified by replacing phosphodiester
CC linkages with methylphosphonate, phosphoramidate, phosphorothioate or
CC hydroxylamine linkages, by replaced ribose with other hexo- or
CC pentopyranoses or 3',5'-carbocyclically bridged 2'-deoxyribose
CC derivatives. The nucleic acid sequences are contained in liposomes. The
CC composition is useful for preventing or treating inflammatory changes to
CC epithelial covering tissue, including changes caused by pathogens,
CC autoimmune reactions, tumor necrosis factor, toxins and irritants,
CC especially aging processes, psoriasis, atopic eczema, dry skin, alopecia
CC areata, vitiligo, bullous diseases, rejection reactions, sunburn and
CC parodontosis. This sequence represents a phosphorothioate or
CC phosphodiester oligonucleotide used to illustrate the method of the
CC invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

```

Db	1	AAAAAAAAAAAAAAAAAAAAA	20
Db	RESULT 637		
XX	AEC31676/c		
ID	AEC31676 standard; DNA; 20 BP.		
XX	AEC31676;		
XX	AEC31676;		
XX	20-OCT-2005 (first entry)		
DE	Phosphorothioate oligonucleotide SEQ ID NO:10.		
XX	phosphorothioate; antiviral; ss.		
XX	Synthetic.		
OS			
XX	Key	Location/Qualifiers	
FH	modified_base	1..20	
FT		/*tag= b	
FT		/mod_base= OTHER	
FT		/note= "OTHER=phosphorothioate backbone"	
FT	modified_base	1	
FT		/*tag= a	
FT		/mod_base= OTHER	
FT		/note= "OTHER=2'-O-methoxyethyl-thymine"	
XX	US2005165226-A1.		
PN			
XX	28-JUL-2005.		
XX	17-MAY-2004; 2004US-00847502.		
XX	10-JAN-2001; 2001WO-US000715.		
PR	12-DEC-2002; 2002US-00181200.		
XX	(ISIS-) ISIS PHARM INC.		
PA			
XX	Cole DL, Ravikumar VT, Cheruvallath ZS;		
PI			
XX	WPI; 2005-615154/63.		
DR			
XX	Preparation of oligonucleotide with phosphorothioate internucleoside linkage(s) that determines stereochemical pathways of nucleic acid		
PT	recognizing enzyme by, phosphorylating 5'-hydroxyl of nucleic acid and		
PT	oxidizing phosphite intermediate.		
PT			
XX	Example 12; SEQ ID NO 10; 12pp; English.		
PS			
XX	The invention relates to a novel method for preparing an oligonucleotide		
CC	with phosphorothioate internucleoside linkage(s), by phosphorylating the		
CC	5'-hydroxyl of a nucleic acid group to form a phosphite intermediate; and		
CC	oxidizing the phosphite intermediate with a substituted acetyl disulfide		
CC	or acetyl disulfide in an aprotic solvent with a protic solvent or a		
CC	basic solvent enough to convert the phosphite intermediate to		
CC	phosphorothioate. The method is useful in molecular biological research		
CC	and in applications such as anti-viral therapy. Modified oligonucleotides		
CC	are also useful as antisense reagents because they can block ribonucleic		
CC	acid translation, and are nuclease resistant. Phosphorothioate-containing		
CC	oligonucleotides are also useful in determining the stereochemical		
CC	pathways of certain enzymes that recognize nucleic acids. The sequences		
CC	shown in (AEC31667-AEC31682) represent oligonucleotides of the invention.		
XX	Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;		
SQ			
Query Match	0.7%; Score 20; DB 1; Length 20;		
Best Local Similarity	100.0%; Pred. No. 6.8e+02;		
Matches	20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
QY	2709 AAAAAAAAAAAAAAAAAAAAAA 2728		
DB	20 AAAAAAAAAAAAAAAAAAAAAA 1		

RESULT 639
AEC37012/C
ID AEC37012 standard; DNA; 20 BP.
XX
AC AEC37012;
XX
DT 03-NOV-2005 (first entry)
XX
DE Oligodeoxythymidine dT20.
XX
KW Antimicrobial; antibacterial; fungicide; protozoacide;
KW bacterial infection; fungal infection; protozoal infection; gene therapy;
KW drug screening; ss.
XX
OS Synthetic.
XX
FN WO2005079523-A2.
XX
PD 01-SEP-2005.
XX
PF 18-FEB-2005; 2005WO-US005398.
XX
PR 18-FEB-2004; 2004US-0545370P.
PR 01-NOV-2004; 2004US-0623909P.
XX
PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
PI Evans DL, Kaur H, Jaso-Friedmann L, Leary JH, Praveen K;
XX WPI; 2005-582941/59.
DR
XX
XX New teleost-derived antimicrobial non-scavenger Receptor A, non-toll like
PT receptor polypeptide, useful for treating a disorder resulting from a
PT microbial infection and/or reducing antibiotic resistance.
XX
PS Example 1; SEQ ID NO 10; 84pp; English.
XX
XX The invention provides an isolated antimicrobial non-scavenger receptor
CC A, non-toll like receptor polypeptide having a molecular weight of about
CC 22-30 kDa and having properties selected from: (a) (i) being obtainable
CC from a teleost, e.g. catfish (*Ictalurus punctatus*), mammalian monocytes
CC or mammalian macrophages, (ii) binds to oligoguanosine, (iii) comprises
CC 58 basic amino acids selected Lys and Arg, (iv) comprises 50 hydrophobic
CC amino acids selected from Ala, Ile, Leu, Phe, Trp and Val, and (v)
CC comprises 50 polar amino acids selected from Asn, Cys, Gln, Ser, Thr and
CC Tyr, containing 11 Lys-rich motifs; (b) comprises an amino acid sequence
CC selected from: amino acid residues 1-60, 1-118, 27-51, 136-159, or 173-
CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
CC that hybridizes under stringent conditions to the opposite strand of a
CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
CC comprising conservative amino acid substitutions; and (g) a fragment of
CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
CC activity. A library comprising one or more of these polypeptides is
CC claimed. A method of identifying an antimicrobial polypeptide comprises
CC contacting candidate compounds with the polypeptide or library and
CC selecting those capable of inhibiting the bioactivity of the polypeptide.
CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
CC membranes from cultured cells consisting of NCCs from a teleost fish;
CC isolating polypeptide from the isolated membranes; and determining if the
CC polypeptide binds to oligoguanosine and/or has antimicrobial activity.
CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
CC vectors and host cells, and a microarray comprising the nucleic acids. A
CC claimed method for detecting the presence or absence of an antimicrobial
CC polypeptide in a sample comprises determining the presence or absence of
CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
CC microarray, and assaying the sample for antimicrobial activity. Host
CC cells comprising the nucleic acid may be used to obtain the claimed
CC polypeptide. An antibody which binds the claimed polypeptide can also be
CC used to identify an antimicrobial protein. A claimed pharmaceutical
CC composition comprising the antimicrobial polypeptide and/or nucleic acid

CC is used to treat a disorder resulting from a microbial infection and/or
CC to reduce antibiotic resistance. The polypeptide is present in an amount
CC effective to inhibit microbial growth, e.g. bacterial, protozoa or fungal
CC growth in a subject, e.g. a mammal (human), or in an amount sufficient to
CC reduce antibiotic resistance. The present sequence is that of
CC oligodeoxythymidine dT20. In an example from the invention, dT20 was used
CC to identify membrane proteins on teleost nonspecific cytotoxic cells that
CC bind single base oligodeoxynucleotide ligands.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 640
AEC37011
ID AEC37011 standard; DNA; 20 BP.
XX
AC AEC37011;
XX
DT 03-NOV-2005 (first entry)
XX
DE Oligodeoxyadenosine dG20.
XX
KW Antimicrobial; antibacterial; fungicide; protozoacide;
KW bacterial infection; fungal infection; protozoal infection; gene therapy;
KW drug screening; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= optional 5' biotin label"
XX
PN WO2005079523-A2.
XX
PD 01-SEP-2005.
XX
PF 18-FEB-2005; 2005WO-US005398.
XX
PR 18-FEB-2004; 2004US-0545370P.
PR 01-NOV-2004; 2004US-0623909P.
XX
PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
PI Evans DL, Kaur H, Jaso-Friedmann L, Leary JH, Praveen K;
XX WPI; 2005-582941/59.
DR
XX
XX New teleost-derived antimicrobial non-scavenger Receptor A, non-toll like
PT receptor polypeptide, useful for treating a disorder resulting from a
PT microbial infection and/or reducing antibiotic resistance.
XX
PS Example 1; SEQ ID NO 9; 84pp; English.
XX
XX The invention provides an isolated antimicrobial non-scavenger receptor
CC A, non-toll like receptor polypeptide having a molecular weight of about
CC 22-30 kDa and having properties selected from: (a) (i) being obtainable
CC from a teleost, e.g. catfish (*Ictalurus punctatus*), mammalian monocytes
CC or mammalian macrophages, (ii) binds to oligoguanosine, (iii) comprises
CC 58 basic amino acids selected Lys and Arg, (iv) comprises 50 hydrophobic
CC amino acids selected from Ala, Ile, Leu, Phe, Trp and Val, and (v)
CC comprises 50 polar amino acids selected from Asn, Cys, Gln, Ser, Thr and
CC Tyr, containing 11 Lys-rich motifs; (b) comprises an amino acid sequence
CC selected from: amino acid residues 1-60, 1-118, 27-51, 136-159, or 173-
CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
CC that hybridizes under stringent conditions to the opposite strand of a
CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
CC comprising conservative amino acid substitutions; and (g) a fragment of
CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
CC activity. A library comprising one or more of these polypeptides is
CC claimed. A method of identifying an antimicrobial polypeptide comprises
CC contacting candidate compounds with the polypeptide or library and
CC selecting those capable of inhibiting the bioactivity of the polypeptide.
CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
CC membranes from cultured cells consisting of NCCs from a teleost fish;
CC isolating polypeptide from the isolated membranes; and determining if the
CC polypeptide binds to oligoguanosine and/or has antimicrobial activity.
CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
CC vectors and host cells, and a microarray comprising the nucleic acids. A
CC claimed method for detecting the presence or absence of an antimicrobial
CC polypeptide in a sample comprises determining the presence or absence of
CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
CC microarray, and assaying the sample for antimicrobial activity. Host
CC cells comprising the nucleic acid may be used to obtain the claimed
CC polypeptide. An antibody which binds the claimed polypeptide can also be
CC used to identify an antimicrobial protein. A claimed pharmaceutical
CC composition comprising the antimicrobial polypeptide and/or nucleic acid

CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
 CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
 CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
 CC that hybridizes under stringent conditions to the opposite strand of a
 CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
 CC comprising conservative amino acid substitutions; and (g) a fragment of
 CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
 CC activity. A library comprising one or more of these polypeptides is
 CC claimed. A method of identifying an antimicrobial polypeptide comprises
 CC contacting candidate compounds with the polypeptide or library and
 CC selecting those capable of inhibiting the bioactivity of the polypeptide.
 CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
 CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
 CC membranes from cultured cells consisting of NCCs from a teleost fish;
 CC isolating polypeptide from the isolated membranes; and determining if the
 CC polypeptide binds to oligomycin and/or has antimicrobial activity.
 CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
 CC vectors and host cells, and a microarray comprising the nucleic acids. A
 CC claimed method for detecting the presence or absence of an antimicrobial
 CC polypeptide in a sample comprises determining the presence or absence of
 CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
 CC microarray, and assaying the sample for antimicrobial activity. Host
 CC cells comprising the nucleic acid may be used to obtain the claimed
 CC polypeptide. An antibody which binds the claimed polypeptide can also be
 CC used to identify an antimicrobial protein. A claimed pharmaceutical
 CC composition comprising the antimicrobial polypeptide and/or nucleic acid
 CC is used to treat a disorder resulting from a microbial infection and/or
 CC to reduce antibiotic resistance. The polypeptide is present in an amount
 CC effective to inhibit microbial growth, e.g. bacterial, protozoa or fungal
 CC growth in a subject, e.g. a mammal (human), or in an amount sufficient to
 CC reduce antibiotic resistance. The present sequence is that of
 CC oligodeoxyadenosine dA20. In an example from the invention, dA20 was used
 CC to identify membrane proteins on teleost nonspecific cytotoxic cells that
 CC bind single base oligodeoxynucleotide ligands.

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 641
 AEC91079/c
 ID AEC91079 standard; DNA; 20 BP.
 AC AEC91079;
 DT 17-NOV-2005 (first entry)
 DE p53 cancer inhibition gene negative control DNA probe, SEQ ID 7.

XX biochip; probe; ss.
 XX Synthetic.
 XX JP2005249429-A.

XX 15-SEP-2005.

XX 01-MAR-2004; 2004JP-00056758.

XX 01-MAR-2004; 2004JP-00056758.

XX (EBAR) EBARA CORP.

XX Nakamura K, Abe Y, Ogure N;

XX WPI; 2005-668391/69.

XX Reaction detection chip e.g. deoxyribonucleic acid chip for diagnosis of
 PT cancer, has porous-glass particles that are embedded in organic film, as
 PT monolayer.

XX Example; SEQ ID NO 7; 19pp; Japanese.

XX The invention relates to a novel reaction detection chip e.g. a DNA chip
 CC for diagnosis of disease. The novel chip has porous-glass particles that
 CC are embedded in organic film (e.g. vinyl acetate) as a monolayer on a
 CC substrate (e.g. silicon). The analyte is preferably detected by
 CC fluorescence. The invention further includes a process for the
 CC manufacturing of the detection chip. The detection chip is useful e.g. as
 CC a DNA chip for diagnosis of cancer, and also for analysis of medical
 CC treatment of pathogenesis related gene of multifactorial disorder. This
 CC oligo sequence represents a control DNA probe used in the novel detection
 CC chip of the invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 642

AED13293

ID AED13293 standard; DNA; 20 BP.

XX AED13293;

XX 01-DEC-2005 (first entry)

XX Oligonucleotide ODN1 used to illustrate nucleic acid labeling method.

XX DNA detection; RNA detection; SNP detection; ss.

XX Synthetic.

XX JP2005265617-A.

XX 29-SEP-2005.

XX 18-MAR-2004; 2004JP-00078900.

XX 18-MAR-2004; 2004JP-00078900.

XX (TAKE/) TAKENAKA S.

XX Takenaka S, Nojima T, Mukumoto K, Tabata E;

XX WPI; 2005-685344/71.

XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
 PT derivative for labeling thymine, uracil and guanine, which exists in
 PT mismatch region of nucleic acid or unstable region of hydrogen bond of
 PT nucleic acid.

XX Example 1; Page 24; 40pp; Japanese.

XX The present invention relates to a method (M1) for labeling double
 CC stranded nucleic acid for efficient detection of DNA or RNA. The method
 CC comprises using a carbodiimide derivative for labeling one or more of
 CC thymine, uracil and guanine, which exists in the mismatch region of the
 CC double stranded nucleic acid or its vicinity, or unstable region of the
 CC hydrogen bond of the double stranded nucleic acid. (M1) is useful for
 CC labeling double stranded or single stranded nucleic acid or detecting
 CC single nucleotide polymorphisms. The present sequence was used to
 CC illustrate the method of the invention.

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XX SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 643
AED11364
ID AED11364 standard; DNA; 20 BP.
XX AC AED11364;
XX AC
XX DT 01-DEC-2005 (first entry)
XX
XX Thermodynamic molecule separation test DNA probe, SEQ ID 6.
XX molecule separation; purification; probe; ss.
XX Synthetic.
XX JP2005262199-A.
XX
XX 29-SEP-2005.
XX
XX 23-AUG-2004; 2004JP-00243038.
XX
XX 17-FEB-2004; 2004JP-00040620.
XX
XX (DOKU-) DOKURITSU GVOSPI HOJIN SANGYO GIJUTSU SO.
XX
XX Yamashita K, Maeda H, Miyazaki M, Nakamura H, Yamaguchi K;
XX WPI; 2005-679037/70.
XX
XX Molecule separation for biotechnology, comprises forming a nonturbulent
PT flow condition for each solute molecule based on thermodynamic
PT characteristics and changing flow conditions at arbitrary points.
XX
XX Example 2; SEQ ID NO 6; 12pp; Japanese.
XX
XX The invention relates to a novel method for molecule separation. The
CC method comprises that a non-turbulent flow condition is formed for each
CC solute molecule contained in a molecular solution separately, based on
CC the thermodynamic characteristics of both molecules. The invention
CC further describes a molecule separation device. The molecule separation
CC method is useful for the manufacture of chemicals, in
CC biotechnology and for separating DNA fragments. The method separates the
CC required molecule from a molecular mixture effectively and rapidly. This
CC oligo sequence represents a DNA probe used to test the novel molecule
CC separation method of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 644
AED42120/C
ID AED42120 standard; DNA; 20 BP.
XX AC AED42120;

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XX DT 15-DEC-2005 (first entry)
XX
XX Antisense oligo of human protein-protein complex polypeptide, SEQ ID 186.
XX
XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
XX Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
XX Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
XX Antiarteriosclerotic; Muscular-Gen.; protein interaction;
XX protein microarray; cancer; familial adenomatous polyposis;
XX gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
XX autoimmune disease; diabetes; heart disease; neurodegenerative disease;
XX asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
XX acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
XX muscular dystrophy; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX US2005222029-A1.
XX
XX 06-OCT-2005.
XX
XX 07-MAR-2005; 2005US-00075234.
XX
XX 04-JAN-2001; 2001US-0259571P.
XX 04-JAN-2001; 2001US-0259573P.
XX 14-MAR-2001; 2001US-0276259P.
XX 15-MAR-2001; 2001US-0276179P.
XX 19-MAR-2001; 2001US-0277013P.
XX 16-APR-2001; 2001US-0284095P.
XX 17-APR-2001; 2001US-0284220P.
XX 19-APR-2001; 2001US-0285324P.
XX 30-APR-2001; 2001US-0287513P.
XX 10-JUL-2001; 2001US-0304101P.
XX 23-JUL-2001; 2001US-0307233P.
XX 22-OCT-2001; 2001US-0347829P.
XX 25-OCT-2001; 2001US-034818P.
XX 04-JAN-2002; 2002US-00035344.
XX 07-JAN-2002; 2002US-0346384P.
XX 17-JAN-2002; 2002US-0349843P.
XX 06-FEB-2002; 2002US-0354899P.
XX 14-MAR-2002; 2002US-00098979.
XX 14-MAR-2002; 2002US-00099924.
XX 18-MAR-2002; 2002US-00100503.
XX 15-APR-2002; 2002US-00122573.
XX 17-APR-2002; 2002US-00124550.
XX 17-APR-2002; 2002US-00124767.
XX 18-APR-2002; 2002US-00125639.
XX 29-APR-2002; 2002US-00135802.
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX WPI; 2005-664172/68.
XX
XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX
XX Disclosure; SEQ ID NO 186; 198pp; English.
XX
XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises: a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include

```

CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
 CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
 CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an antisense oligo of a human protein which forms
 CC part of a protein-protein complex of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 648 TAGCCACATGTCAGGGTGG 667
 Db 20 TAGCCACATGTCAGGGTGG 1
 RESULT 645
 AED42121/C
 ID AED42121 standard; DNA; 20 BP.
 XX
 AC AED42121;
 XX
 DT 15-DEC-2005 (first entry)
 XX
 DE Antisense oligo of human protein-protein complex polypeptide, SEQ ID 187.
 KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
 KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
 KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
 KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;
 KW protein microarray; cancer; familial adenomatous polyposis;
 KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2005222029-A1.
 XX
 PD 06-OCT-2005.
 XX
 PF 07-MAR-2005; 2005US-00075234.
 XX
 PR 04-JAN-2001; 2001US-0259571P.
 PR 04-JAN-2001; 2001US-0259573P.
 PR 14-MAR-2001; 2001US-0276259P.
 PR 15-MAR-2001; 2001US-0276179P.
 PR 19-MAR-2001; 2001US-0277013P.
 PR 16-APR-2001; 2001US-0284095P.
 PR 17-APR-2001; 2001US-0284220P.
 PR 17-APR-2001; 2001US-0284404P.
 PR 19-APR-2001; 2001US-0285324P.
 PR 30-APR-2001; 2001US-0287513P.
 PR 10-JUL-2001; 2001US-0304101P.
 PR 23-JUL-2001; 2001US-0307233P.
 PR 22-OCT-2001; 2001US-0347829P.
 PR 25-OCT-2001; 2001US-0343818P.
 PR 04-JAN-2002; 2002US-00035344.
 PR 07-JAN-2002; 2002US-0346384P.
 PR 17-JAN-2002; 2002US-0349843P.
 PR 06-FEB-2002; 2002US-0354899P.
 PR 14-MAR-2002; 2002US-00098979.
 PR 14-MAR-2002; 2002US-00099924.
 PR 18-MAR-2002; 2002US-00100503.
 PR 15-APR-2002; 2002US-00122573.
 PR 17-APR-2002; 2002US-00124550.
 PR 17-APR-2002; 2002US-00124767.
 PR 18-APR-2002; 2002US-00125639.
 PR 29-APR-2002; 2002US-00135802.

XX (MYRI-) MYRIAD GENETICS INC.
 PA
 XX Bartel P, Cimborra D, Sugiyama J, Wettstein DA, Heichman K;
 PI
 XX WPI; 2005-664172/68.
 DR
 XX New isolated protein complex having a first protein interacting with a
 PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
 PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
 XX
 PS Disclosure; SEQ ID NO 187; 198pp; English.
 XX
 CC The invention relates to a novel isolated protein complex having a first
 CC protein interacting with a second protein. The invention further
 CC comprises: a protein microarray comprising the protein complex; a method
 CC for selecting modulators of the protein complex; a method of selecting
 CC modulators of an interaction between a first protein and a second protein
 CC ; and the treating and/or preventing of diseases and disorders associated
 CC with the protein complexes. The protein complexes are useful in screening
 CC assays for identifying compounds effective in modulating the protein
 CC complexes, and in treating and/or preventing diseases and disorders
 CC associated with the protein complexes. The diseases and disorders include
 CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, sepsis, osteoporosis, obesity, viral infection,
 CC inflammatory disorders, atherosclerosis, and muscular dystrophy. This
 CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an antisense oligo of a human protein which forms
 CC part of a protein-protein complex of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 646 AGTAGCCACATGTCAGGT 665
 Db 20 AGTAGCCACATGTCAGGT 1
 RESULT 646
 AED42119/C
 ID AED42119 standard; DNA; 20 BP.
 XX
 AC AED42119;
 XX
 DT 15-DEC-2005 (first entry)
 XX
 DE Antisense oligo of human protein-protein complex polypeptide, SEQ ID 185.
 KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
 KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
 KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
 KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;
 KW protein microarray; cancer; familial adenomatous polyposis;
 KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2005222029-A1.
 XX
 PD 06-OCT-2005.
 XX
 PF 07-MAR-2005; 2005US-00075234.
 XX
 PR 04-JAN-2001; 2001US-0259571P.
 PR 04-JAN-2001; 2001US-0259573P.
 PR 14-MAR-2001; 2001US-0276259P.
 PR 15-MAR-2001; 2001US-0276179P.
 PR 19-MAR-2001; 2001US-0277013P.
 PR 16-APR-2001; 2001US-0284095P.
 PR 17-APR-2001; 2001US-0284220P.
 PR 17-APR-2001; 2001US-0284404P.
 PR 19-APR-2001; 2001US-0285324P.
 PR 30-APR-2001; 2001US-0287513P.
 PR 10-JUL-2001; 2001US-0304101P.
 PR 23-JUL-2001; 2001US-0307233P.
 PR 22-OCT-2001; 2001US-0347829P.
 PR 25-OCT-2001; 2001US-0343818P.
 PR 04-JAN-2002; 2002US-00035344.
 PR 07-JAN-2002; 2002US-0346384P.
 PR 17-JAN-2002; 2002US-0349843P.
 PR 06-FEB-2002; 2002US-0354899P.
 PR 14-MAR-2002; 2002US-00098979.
 PR 14-MAR-2002; 2002US-00099924.
 PR 18-MAR-2002; 2002US-00100503.
 PR 15-APR-2002; 2002US-00122573.
 PR 17-APR-2002; 2002US-00124550.
 PR 17-APR-2002; 2002US-00124767.
 PR 18-APR-2002; 2002US-00125639.
 PR 29-APR-2002; 2002US-00135802.

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PR 15-MAR-2001; 2001US-0276179P.
PR 19-MAR-2001; 2001US-0277013P.
PR 16-APR-2001; 2001US-0284095P.
PR 17-APR-2001; 2001US-0284220P.
PR 17-APR-2001; 2001US-0284404P.
PR 19-APR-2001; 2001US-0285324P.
PR 30-APR-2001; 2001US-0287513P.
PR 10-JUL-2001; 2001US-0304101P.
PR 23-JUL-2001; 2001US-0307233P.
PR 22-OCT-2001; 2001US-0347829P.
PR 25-OCT-2001; 2001US-0343818P.
PR 04-JAN-2002; 2002US-00035344.
PR 07-JAN-2002; 2002US-0346384P.
PR 17-JAN-2002; 2002US-0349843P.
PR 06-FEB-2002; 2002US-0354899P.
PR 14-MAR-2002; 2002US-00098979.
PR 14-MAR-2002; 2002US-00099924.
PR 18-MAR-2002; 2002US-00100503.
PR 15-APR-2002; 2002US-00122573.
PR 17-APR-2002; 2002US-00124550.
PR 17-APR-2002; 2002US-00124767.
PR 18-APR-2002; 2002US-00125639.
PR 29-APR-2002; 2002US-00135802.
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX WPI; 2005-664172/68.
XX
XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX
XX Disclosure; SEQ ID NO 185; 198pp; English.
XX
XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an antisense oligo of a human protein which forms
CC part of a protein-protein complex of the invention.
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 650 GCCAACATGTCAGGTGGGA 669
Db 20 GCCAACATGTCAGGTGGGA 1

RESULT 647
AED75083/C
ID AED75083 standard; DNA; 20 BP.
XX
XX AED75083;
AC
AC
AC
DT 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 218.

```

```

XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX Crohns disease; ulcerative colitis; eczema; skin allergy;
XX contact dermatitis; ss; phosphorothioate.
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
PT to augment T-helper cells like immune activation and to treat non-
PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 218; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
CC (Th1)-like immune activation in a subject. The method comprises
CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
CC immune activation; and administering a cyclooxygenase inhibitor (II) to
CC inhibit prostaglandin expression, is new. The present sequence is one
CC such immunostimulatory nucleic acid. (I) is useful for treating non-
CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
CC contact dermatitis or latex dermatitis.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 648
AED75397/C
ID AED75397 standard; DNA; 20 BP.
XX
XX AED75397;
AC
AC
AC
DT 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 533.
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX Crohns disease; ulcerative colitis; eczema; skin allergy;
XX contact dermatitis; ss.
XX

```


CC one or more types of nanoparticle having target binding complements and
 CC detecting any light scattering complex formed. The nanoparticle probe
 CC complexes comprise two or more probes bound to a specific target analyte.
 CC The present sequence is an oligonucleotide used to prepare aptamer-coated
 CC gold probe arrays.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 651

AED67955/c
 ID AED67955 standard; DNA; 20 BP.

XX AC AED67955;

XX 12-JAN-2006 (first entry)

XX T20 diluent SEQ ID: 26 #1 used to prepare aptamer-coated gold probes.

XX Analyte detection; DNA detection; protein detection; ss.

XX Synthetic.

Key Location/Qualifiers
 modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= Linked to a steroid"

XX US2005250094-A1.

XX 10-NOV-2005.

XX 22-NOV-2004; 2004US-00995051.

XX 30-MAY-2003; 2003US-0474569P.

XX 29-AUG-2003; 2003US-0499034P.

XX 04-NOV-2003; 2003US-0517450P.

XX 03-MAY-2004; 2004US-0567874P.

XX 27-MAY-2004; 2004US-00854848.

XX (NANO-) NANOSPHERE INC.

XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;

XX WPI; 2005-784662/80.

XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 XX sample, comprises contacting sample with one or more types of
 XX nanoparticle having target binding complements, and detecting any light
 XX scattering complex formed.

XX Disclosure; SEQ ID NO 26; 70pp; English.

XX The present invention provides a method for detecting the presence or
 XX absence of a single target molecule or target analyte (e.g. nucleic acid,
 XX protein, lipid, bacterium). The method involves contacting sample with
 XX one or more types of nanoparticle having target binding complements and
 XX detecting any light scattering complex formed. The nanoparticle probe
 XX complexes comprise two or more probes bound to a specific target analyte.
 XX The present sequence is a T20 diluent which is used in the preparation of
 XX aptamer-coated gold probes. Note: The present sequence is the SEQ ID NO:
 XX 26 which is given in the sequence listing. This sequence differs from the
 XX SEQ ID NO: 26 shown on page 21 in example 17 of the specification (see
 XX AED67970).

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 652

AED67960
 ID AED67960 standard; DNA; 20 BP.

XX AC AED67960;

XX 12-JAN-2006 (first entry)

XX Deoxyadenosine spacer oligonucleotide SEQ ID NO: 31.

XX Analyte detection; DNA detection; protein detection; ss.

XX Unidentified.

XX US2005250094-A1.

XX 10-NOV-2005.

XX 22-NOV-2004; 2004US-00995051.

XX 30-MAY-2003; 2003US-0474569P.

XX 29-AUG-2003; 2003US-0499034P.

XX 04-NOV-2003; 2003US-0517450P.

XX 03-MAY-2004; 2004US-0567874P.

XX 27-MAY-2004; 2004US-00854848.

XX (NANO-) NANOSPHERE INC.

XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;

XX WPI; 2005-784662/80.

XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 XX sample, comprises contacting sample with one or more types of
 XX nanoparticle having target binding complements, and detecting any light
 XX scattering complex formed.

XX Disclosure; SEQ ID NO 31; 70pp; English.

XX The present invention provides a method for detecting the presence or
 XX absence of a single target molecule or target analyte (e.g. nucleic acid,
 XX protein, lipid, bacterium). The method involves contacting sample with
 XX one or more types of nanoparticle having target binding complements and
 XX detecting any light scattering complex formed. The nanoparticle probe
 XX complexes comprise two or more probes bound to a specific target analyte.
 XX The present sequence is a deoxyadenosine spacer oligonucleotide which is
 XX useful for detecting analytes based on evanescent illumination of the
 XX invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 653

```

AEE01383/c
ID AEE01383 standard; DNA; 20 BP.
XX
AC AEE01383;
XX
DT 26-JAN-2006 (first entry)
XX
DE Universal oligonucleotide SEQ ID NO:33.
XX
KW antibody; stem cell factor; probe; PCR; primer; ss.
XX
OS Synthetic.
XX
PN US2005261175-A1.
XX
PD 24-NOV-2005.
XX
PF 28-JAN-2003; 2003US-00353783.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00173229.
PR 24-MAY-1995; 95US-00448729.
PR 21-AUG-2000; 2000US-00643659.
XX
PA (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
DR WPI; 2005-796179/81.
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
XX
PS Example 3; SEQ ID NO 33; 217pp; English.
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAACAAAAAAAAAAAAAAAAAAAA 2726
Db |||||
20 CTAACAAAAAAAAAAAAAAAAAAAA 1

RESULT 654
AED85822/c
ID AED85822 standard; DNA; 20 BP.
XX
AC AED85822;
XX
DT 12-JAN-2006 (first entry)
XX
DE Poly-thymine negative control probe SEQ ID NO: 7.
XX
KW ss; biochip; p53 gene; tumor suppressor gene p53; DNA detection; probe.
XX
OS Synthetic.
OS Unidentified.
XX
XX Key Location/Qualifiers
modified_base 20
/*tag= a
/mod_base= OTHER
FT /note= "conjugated porous glass particle"
FT
XX US2005254998-A1.
XX
PD 17-NOV-2005.
XX
XX 28-FEB-2005; 2005US-00066434.
XX
PR 01-MAR-2004; 2004JP-00056758.
PR 12-AUG-2004; 2004JP-00235221.
XX
PA (EBAR ) EBARA CORP.
XX
PI Nakamura K, Abe M, Ogure N;
XX
DR WPI; 2006-016978/02.
XX
XX Reactive detection chip e.g. DNA chip to recognize functional molecule in
PT genetic diagnosis, comprises spots formed by immobilizing porous
PT particles including probes, in single-layered state on substrate, with
PT particles transparent to light.
XX
PS Example 1; SEQ ID NO 7; 26pp; English.
XX
XX The present sequence is a negative control DNA probe used in the
CC validation of the novel reactive detection biochip which is the subject
CC of the invention. The present inventions relates to a novel reactive
CC detection chip comprising spots formed by immobilizing several porous
CC particles in a single-layered state on a substrate surface, where the
CC porous particles are transparent to incident light and have probe
CC molecules bound to surfaces of the particles and pores. Such chips are
CC useful in detecting molecules in a sample. In these chips, the number of
CC probes and spot thickness can be stably controlled, and the three-
CC dimensional array of the probes makes the supply of sample to the probes
CC uniform. Thus, the magnitude of signal components is stabilized, and the
CC signal components are stably increased, consequently improving the signal
CC -to-noise ratio and enhancing the detection capability of the chip. The
CC chips are manufactured by forming a thermoplastic organic film on the
CC substrate, applying the porous particles in a spotted arrangement on the
CC organic film using a spotter (which is claimed), heating the substrate to
CC soften the organic film, embedding porous particles in the organic film
CC to immobilize the particles, and removing excess of porous particles
CC which are not immobilized. The use of spotter in chip manufacture
CC prevents agglomeration of the porous particles contained in the spotting
CC solution, maintains the dispersed state of porous particles without
CC adding any additive to the spotting solution, and thus enabling the chip
CC to be manufactured more efficiently.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
```


Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 655
 AEE60695/c
 ID AEE60695 standard; DNA; 20 BP.
 XX
 AC AEE60695;
 XX
 DT 09-FEB-2006 (first entry)
 XX
 DE Universal stem cell factor PCR primer SEQ ID NO:33.
 XX
 KW hematopoiesis; stem cell factor; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US6967029-B1.
 XX
 PD 22-NOV-2005.
 XX
 PF 21-AUG-2000; 2000US-00643659.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449649.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Zeebo KM, Bosseman RA, Suggs SV, Martin FH;
 XX
 XX WPI; 2006-053612/06.
 DR
 XX
 XX Enhancing hematopoiesis in human, comprises expanding hematopoietic
 PT progenitor cells by adding stem cell factor polypeptide to cells and
 PT administering expanded cells to human.
 XX
 XX Example 3; SEQ ID NO 33; 213pp; English.

The invention relates to a method (M1) for enhancing hematopoiesis in a
 CC human or other subject. (M1) comprises: (a) obtaining hematopoietic
 CC progenitor cells from the human or other subject; (b) expanding the cells
 CC obtained in step (a) by adding to the cell a stem cell factor (SCF)
 CC polypeptide having a 195, 208 or 245 amino acid sequence of AEE60706,
 CC AEE60708 or AEE60725, or its biological active fragments that stimulate
 CC growth of hematopoietic progenitor cells; and (c) administering to the
 CC human or other subject the expanded hematopoietic progenitor cells
 CC obtained in step (b), therefore restoring hematopoiesis to effect
 CC hematological recovery in the human or other subject and enhancing
 CC hematopoiesis in the human or other subject. Also described is a method
 CC (M2) for expanding hematopoietic progenitor cells ex vivo, which
 CC comprises: (a) obtaining hematopoietic progenitor cells from a donor; and
 CC (b) expanding the cells obtained in step (a) by adding to the cells the
 CC SCF polypeptide or its biological active fragments. (M1) is useful for
 CC enhancing hematopoiesis in a human or other subject. (M2) is useful for
 CC expanding hematopoietic progenitor cells, where the hematopoietic cells
 CC are chosen from stem cells, lymphoid progenitor cells, myeloid progenitor
 CC cells, megakaryocytes and erythroblasts. (M1) is useful for treating
 CC various stem cell deficiencies such as aplastic anemia, paroxymal
 CC nocturnal hemoglobinuria, myelofibrosis, myeloclerosis, Gaucher's
 CC disease, Niemann-Pick disease, Hodgkin's disease, Kala-azar, sarcoidosis,

CC disseminated fungus disease, fulminating septicemia, malaria, vitamin
 CC B12, and folic acid deficiency, pyridoxine deficiency, Diamond blackfan
 CC anemia, hypopigmentation disorders such as piebaldism and vitiligo, and
 CC AIDS. (M2) is useful in expanding early hematopoietic progenitors in
 CC syngeneic, allogeneic or autologous bone marrow transplantation. (M1)
 CC enhances hematopoiesis by expanding early hematopoietic progenitors. The
 CC present sequence represents a universal PCR primer for SCF, which is used
 CC in an example from the present invention.

XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2707 CTAATAAAAAAAAAAAAAA 2726
 DB 20 CTAATAAAAAAAAAAAAAA 1

RESULT 656
 AEF05127/c
 ID AEF05127 standard; DNA; 20 BP.
 XX
 AC AEF05127;
 XX
 DT 23-MAR-2006 (first entry)
 XX
 DE Synthetic poly-T20 oligonucleotide SEQ ID NO:10.
 XX
 KW aptamer; analyte detection; ss.
 XX
 OS Synthetic.
 XX
 PN US2006014172-A1.
 XX
 PD 19-JAN-2006.
 XX
 PF 03-MAY-2005; 2005US-00121165.
 XX
 PR 03-MAY-2004; 2004US-0567874P.
 PR 22-NOV-2004; 2004US-00995051.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Muller UR, Storhoff JJ, Senical MJ, Garimella V;
 XX
 XX WPI; 2006-099415/10.

Novel aptamer probe comprising aptamer having oligonucleotide tail, and
 PT oligonucleotide having sequence complementary to portion of sequence of
 PT oligonucleotide tail having optional label, useful for detecting target
 XX analyte in sample.

Example 5; SEQ ID NO 10; 47pp; English.

The invention relates to an aptamer probe (I) comprising an aptamer
 CC having an oligonucleotide tail, and a second oligonucleotide having a
 CC sequence complementary to at least a portion of a sequence of the
 CC oligonucleotide tail comprising an optional label. Also described: (1)
 CC detecting (M1) at least one target analyte having at least two binding
 CC sites, in a sample; (2) a nanoparticle-aptamer conjugate probe (II)
 CC comprising nanoparticles, and at least one type of aptamers being present
 CC on the nanoparticle at a surface density ranging from between about
 CC 1.0x10¹⁰ and about 5.0x10¹² aptamers/cm²; (3) a substrate (III) for
 CC detecting one or more target analytes comprising a substrate, at least
 CC one type of capture aptamers bound to the substrate, where each type of
 CC capture aptamers binds to the specific target analyte and arranged in an
 CC array of discrete spots, and electrodes located between the discrete
 CC spots; and (4) a kit (K1) for detecting one or more analytes in a sample
 CC comprising (I) or (II) and an optional substrate. (I) is useful for
 CC detecting one or more target analyte in a sample. The method is useful
 CC for detecting at least one target analyte in a sample. The kit or

CC substrate are useful for detecting one or more analytes. (I) is useful in
 CC barcode detection assays and in therapeutic, diagnostic and target
 CC validation applications. (I) can be readily synthesized, manipulated and
 CC stored for long periods of time. (I) provides reproducibility in
 CC production. The present sequence represents a synthetic poly-T20
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 657
 AEF05124
 ID AEF05124 standard; DNA; 20 BP.
 XX AC AEF05124;
 XX DT 23-MAR-2006 (first entry)
 XX DE Synthetic poly-A20 oligonucleotide SEQ ID NO:7.
 XX KW aptamer; analyte detection; ss.
 XX OS Synthetic.
 XX PN US2006014172-A1.
 XX PD 19-JAN-2006.
 XX PF 03-MAY-2005; 2005US-00121165.
 XX PR 03-MAY-2004; 2004US-0567874P.
 XX PR 22-NOV-2004; 2004US-00995051.
 XX XX (NANO-) NANOSPHERE INC.
 XX PA Muller UR, Storhoff JJ, Senical MJ, Garimella V;
 XX PI WPI; 2006-099415/10.
 XX DR
 XX XX Novel aptamer probe comprising aptamer having oligonucleotide tail, and
 PT oligonucleotide having sequence complementary to portion of sequence of
 PT oligonucleotide tail having optional label, useful for detecting target
 PT analyte in sample.

XX Example 4; SEQ ID NO 7; 47bp; English.
 PS The invention relates to an aptamer probe (I) comprising an aptamer
 CC having an oligonucleotide tail, and a second oligonucleotide having a
 CC sequence complementary to at least a portion of a sequence of the
 CC oligonucleotide tail comprising an optional label. Also described: (1)
 CC detecting (M1) at least one target analyte having at least two binding
 CC sites, in a sample; (2) a nanoparticle-aptamer conjugate probe (II)
 CC comprising nanoparticles, and at least one type of aptamers being present
 CC on the nanoparticle at a surface density ranging from between about
 CC 1.0x10¹⁰ and about 5.0x10¹² aptamers/cm²; (3) a substrate (III) for
 CC detecting one or more target analytes comprising a substrate, at least
 CC one type of capture aptamers bound to the substrate, where each type of
 CC capture aptamers binds to the specific target analyte and arranged in an
 CC array of discrete spots, and electrodes located between the discrete
 CC spots; and (4) a kit (K1) for detecting one or more analytes in a sample
 CC comprising (I) or (II) and an optional substrate. (I) is useful for
 CC detecting one or more target analyte in a sample. The method is useful
 CC for detecting at least one target analyte in a sample. The kit or
 CC substrate are useful for detecting one or more analytes. (I) is useful in

CC barcode detection assays and in therapeutic, diagnostic and target
 CC validation applications. (I) can be readily synthesized, manipulated and
 CC stored for long periods of time. (I) provides reproducibility in
 CC production. The present sequence represents a synthetic poly-A20
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 658
 AEG11130/C
 ID AEG11130 standard; DNA; 20 BP.
 XX AC AEG11130;
 XX DT 20-APR-2006 (first entry)
 XX DE Antisense oligonucleotide, SEQ ID NO: 1.
 XX KW Antisense oligonucleotide; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE;
 XX KW ss.
 XX OS Synthetic.
 XX OS Unidentified.

XX FH Key Location/Qualifiers
 modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone with 2'-O-methoxyethyl
 (2'-MOE) nucleotides"

XX PN US2006041115-A1.
 XX PD 23-FEB-2006.
 XX PF 15-MAR-2005; 2005US-00081880.
 XX PR 14-JUN-2001; 2001US-00881535.
 XX PR 02-SEP-2004; 2004US-00932630.
 XX XX (RAVI/) RAVIKUMAR V.
 XX PA Ravikumar V;
 XX PI WPI; 2006-210076/22.
 XX DR

XX The present invention relates to a method of preparing an internucleotide
 CC phosphorothioate linkage enriched in the Rp or Sp enantiomer between a
 CC synthon having a hydroxyl moiety at the 5' position and a 2'-substituted
 CC nucleoside having an activated phosphate moiety at the 3'-position
 CC comprises selecting a coupling agent having a pKa of 3.3-4.5 or 6.0-8.0
 CC and coupling the synthon to the 2'-substituted nucleoside in the presence
 CC of the coupling agent. The method and coupling agent of the invention are
 CC useful for preparing an internucleotide phosphorothioate linkage enriched
 CC in the Rp or Sp enantiomer between a synthon having a hydroxyl moiety at
 CC the 5' position and a 2'-substituted nucleoside having an activated
 CC phosphate moiety at the 3'-position. The present sequence is an antisense

PS Example 4; SEQ ID NO 1; 25pp; English.

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CC oligonucleotide with internucleotide phosphorothioate linkage.
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 659
AAQ75713/c
ID AAQ75713 standard; DNA; 21 BP.
XX
AC AAQ75713;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2725
Db 20 ACTAAAAAAAAAAAAAAAAAAAA 1

RESULT 660
AAQ75714/c
ID AAQ75714 standard; DNA; 21 BP.
XX
AC AAQ75714;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

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DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2725
Db 20 ACTAAAAAAAAAAAAAAAAAAAA 1

RESULT 661
AAQ75711/c
ID AAQ75711 standard; DNA; 21 BP.
XX
AC AAQ75711;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

```

XX PS Disclosure; Page 7; 1lpp; Japanese.

XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of

CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily

XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2725

Db 20 ACTAAAAA 1

RESULT 662

AAQ90391

ID AAQ90391 standard; DNA; 21 BP.

AC AAQ90391;

XX DT 08-JAN-1996 (first entry)

XX DE CP-1 (synthetic DNA probe with 3'ribonucleoside terminal #2).

XX CP-1; HLA; dQa; 3' ribonucleoside; self-addressable electronic device;

KW SAED; hybridisation; ss.

XX OS Synthetic.

XX Key Location/Qualifiers

FT misc_feature 21

FT /*tag= a

FT /note= "3' ribonucleoside terminal"

XX WO9512808-A1.

XX 11-MAY-1995.

XX 26-OCT-1994; 94WO-US012270.

XX 01-NOV-1993; 93US-00146504.

XX (NANO-) NANOGEN INC.

XX Heller MJ, Tu E;

XX WPI; 1995-185870/24.

XX New self-addressable electronic devices - used for multi-step and

PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics

PT and bio/polymer synthesis.

XX Example 1; Page 40; 86pp; English.

XX The sequences represented by, AAQ90390-90401 are synthetic DNA probes

CC containing 3' ribonucleoside termini. The sequences shown in AAQ90402-15

CC are synthetic DNA probes with 5' amino termini. These sequences were

CC specific for the polymorphisms of HLA gene dQa. The sequences were used

CC in the device of the invention. This is a self-addressable electronic

CC device (SAED) that can be used to carry out multi-step and multiplex

CC reactions, such as nucleic acid hybridisations. The advantages of this

CC method are that these reactions can be carried out with complete and

CC precise electronic control, and that the rate, specificity and

CC sensitivity of these reactions are greatly improved at micro-locations

XX SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728

Db 1 AAAAAA 20

RESULT 663

AAT10743

ID AAT10743 standard; RNA; 21 BP.

XX AC AAT10743;

XX DT 09-SEP-1996 (first entry)

XX DE Oligonucleotide probe, CP-1.

XX Electronically self-addressable device; ED; electrode; current source;

KW attachment layer; permeable; counterion; genetic typing; probe;

KW detection; ss.

XX OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 21

FT /*tag= a

FT /note= "3'-ribonucleoside terminus"

XX WO9601836-A1.

XX 25-JAN-1996.

XX 05-JUL-1995; 95WO-US008570.

XX 07-JUL-1994; 94US-00271882.

XX (NANO-) NANOGEN INC.

XX Heller MJ, Tu E, Evans GA, Sosnowski RG;

XX WPI; 1996-097582/10.

XX Electronically self-addressable device - used for electronic control of,

PT e.g. nucleic acid hybridisation.

XX Example 1; Page 60; 155pp; English.

XX The sequences given in AAT10742-67 are synthetic oligonucleotides which

CC are used in the construction of the electronically self-addressable

CC device (ED) of the invention. The ED comprises a substrate, an electrode

CC or opt. a number of electrodes supported by the substrate, a current

CC source operatively connected to the electrode and an attachment layer

CC adjacent to the electrode which is permeable to a counterion but not

CC permeable to a molecule capable of insulating or binding to the

CC electrode. The attachment layer is capable of attaching a macromolecule.

CC The ED is used for genetic typing and comprises a number of

CC electronically addressable locations each comprising an electrode, and a

CC binding entity, such as one of these probes, attached to each of the

CC locations capable of detecting the presence of a genetic sequence

XX SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728


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QY      2707 CTAACAAAAA 2726
DB      20 CTAACAAAAA 1

RESULT 666
ADK01285/c
XX      ADK01285 standard; DNA; 21 BP.
AC      ADK01285;
DT      06-MAY-2004 (first entry)
DE      Rat DNA microarray capture oligonucleotide #5.
XX      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW      blood; nerve; germ cell; food additive; food supplement.
XX      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
PT      patterns and screening active agents, uses capture agent with variable
PT      and constant regions.
XX      Example; Page 4; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
CC      nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC      reading out, where the nucleic acids are selectively bound using capture
CC      agents that are (a) immobilised on the surface of a solid matrix and (b)
CC      comprise variable and non-variable regions. The capture oligonucleotides
CC      have a 5'-invariable anchor region, the complement of which is present at
CC      least once in each nucleic acid and a 3'-variable, discriminatory region
CC      that comprises all possible combinations of up to 10 nucleotides to allow
CC      binding of particular sorts of single stranded nucleic acids. The capture
CC      agents are particularly locked nucleic acids (LNA) and the anchor region
CC      comprises a sequence of 10-50, particularly 15-25, T residues. The
CC      capture oligonucleotides are biotinylated and immobilised on a surface by
CC      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC      metal, resin, gel, crystalline material and/or membrane, having semi-
CC      conducting properties and especially in the form of a chip. Its surface
CC      is particularly a layer of (bio)molecular filaments and binding of single
CC      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC      physical, stimulated by an electrical field or through a molecular sieve.
CC      The method is used (i) for analysis of patterns, especially in mucosal,
CC      hair root, blood, nerve or germ cells and (ii) for determining the
CC      activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC      additives or supplements, especially minerals, trace elements, organic
CC      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC      mixtures. The method provides rapid, inexpensive and reproducible
CC      representation of differences in pools of nucleic acids from cells. It
CC      allows imaging of the complete pattern of all nucleic acid in a cell, and
CC      can detect very small differences in the nucleic acid pool. Since the
CC      method is based on comparison of nucleic acid pools, not individual
CC      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC      capture probes used in the method of the invention.
XX      Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX      SQ

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Query Match      0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2707 CTAACAAAAA 2726
DB      20 CTAACAAAAA 1

RESULT 667
ADK01286/c
XX      ADK01286 standard; DNA; 21 BP.
AC      ADK01286;
XX      06-MAY-2004 (first entry)
XX      Rat DNA microarray capture oligonucleotide #6.
XX      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW      blood; nerve; germ cell; food additive; food supplement.
XX      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
PT      patterns and screening active agents, uses capture agent with variable
PT      and constant regions.
XX      Example; Page 5; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
CC      nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC      reading out, where the nucleic acids are selectively bound using capture
CC      agents that are (a) immobilised on the surface of a solid matrix and (b)
CC      comprise variable and non-variable regions. The capture oligonucleotides
CC      have a 5'-invariable anchor region, the complement of which is present at
CC      least once in each nucleic acid and a 3'-variable, discriminatory region
CC      that comprises all possible combinations of up to 10 nucleotides to allow
CC      binding of particular sorts of single stranded nucleic acids. The capture
CC      agents are particularly locked nucleic acids (LNA) and the anchor region
CC      comprises a sequence of 10-50, particularly 15-25, T residues. The
CC      capture oligonucleotides are biotinylated and immobilised on a surface by
CC      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC      metal, resin, gel, crystalline material and/or membrane, having semi-
CC      conducting properties and especially in the form of a chip. Its surface
CC      is particularly a layer of (bio)molecular filaments and binding of single
CC      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC      physical, stimulated by an electrical field or through a molecular sieve.
CC      The method is used (i) for analysis of patterns, especially in mucosal,
CC      hair root, blood, nerve or germ cells and (ii) for determining the
CC      activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC      additives or supplements, especially minerals, trace elements, organic
CC      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC      mixtures. The method provides rapid, inexpensive and reproducible
CC      representation of differences in pools of nucleic acids from cells. It
CC      allows imaging of the complete pattern of all nucleic acid in a cell, and
CC      can detect very small differences in the nucleic acid pool. Since the
CC      method is based on comparison of nucleic acid pools, not individual
CC      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent

```

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
 |||||
 Db 20 CTAATAAAAAAAAAAAAAA 1

RESULT 668
 ADK01343/C
 ID ADK01343 standard; DNA; 21 BP.

XX AC ADK01343;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #63.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It

CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 669

ADK01331/C

ID ADK01331 standard; DNA; 21 BP.

XX AC ADK01331;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #51.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It

CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 670

ADK01329/c

ID ADK01329 standard; DNA; 21 BP.

AC ADK01329;

XX 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #49.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 671

ADK01332/c

ID ADK01332 standard; DNA; 21 BP.

AC ADK01332;

XX 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #52.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX
 SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 672
 ADK01342/c
 ID ADK01342 standard; DNA; 21 BP.

XX AC ADK01342;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #62.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 6; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX

SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 673

ABD25908

ID ABD25908 standard; DNA; 21 BP.

XX AC ABD25908;

XX DT 29-JUL-2004 (first entry)

XX DE A1654215-derived oligonucleotide SEQ ID 4920.

XX Human; antiseize; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antisthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.

XX PN WO200285309-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.

XX PR 24-APR-2001; 2001US-0286036P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antiseize
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

```

XX PS Claim 15; SEQ ID NO 4920; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAAAAAAAAAAAAAA 21

RESULT 674
ABD25907
ID ABD25907 standard; DNA; 21 BP.
AC ABD25907;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1654215-derived oligonucleotide SEQ ID 4919.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX W0200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX

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XX PA (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4919; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAAAAAAAAAAAAAA 21

RESULT 675
ADK67451/c
ID ADK67451 standard; DNA; 21 BP.
XX
XX ADK67451;
XX
XX 06-MAY-2004 (first entry)
XX
XX Electrochemical detection intercalator-related DNA 1.
XX
XX intercalator; electrochemical detection; mismatch; ds.
XX
XX Synthetic.
XX
XX JP2004024114-A.
XX

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PD 29-JAN-2004.
XX
PF 26-JUN-2002; 2002JP-00185555.
XX
PR 26-JUN-2002; 2002JP-00185555.
XX
PA (TAKE/) TAKENAKA S.
PA (TUMK-) TUM KENKYUSHO KK.
XX
DR WPI; 2004-207136/20.
XX
PT Novel intercalator, useful as electrochemical double stranded DNA
PT detection reagent.
XX
PS Example 1; Page 23; 24pp; Japanese.
XX
CC The invention relates to a novel intercalator having a specific formula.
CC The intercalator of the invention may be useful for the electrochemical
CC detection of a gene, as an electrochemical double stranded DNA detection
CC reagent and as an intercalator for inhibiting the influence of mismatch
CC DNA and single stranded DNA. The intercalator enables the transmission of
CC electronic transition between two base pairs to occur efficiently. The
CC current sequence is that of the electrochemical detection intercalator-
CC related DNA 1 of the invention.
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 1 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 676
AEB80248/c
ID AEB80248 standard; RNA; 21 BP.
XX
AC AEB80248;
XX
DT 06-OCT-2005 (first entry)
XX
DE RNA, SEQ ID NO: 6 used in sequencing nucleic acid.
XX
KW DNA sequencing; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Biotinylated"
XX
US2005170367-A1.
XX
PD 04-AUG-2005.
XX
PF 10-JUN-2004; 2004US-00866388.
XX
PR 10-JUN-2003; 2003US-0477426P.
PR 10-JUN-2003; 2003US-0477429P.
XX
PA (QUAK/) QUAKE S R.
PA (BUZB/) BUZBY P R.
XX
PI Quake SR, Buzby PR;
XX
DR WPI; 2005-553679/56.
XX
PT Novel fluorescently labeled nucleoside triphosphate, useful for

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PT determining nucleic acid sequence of target nucleic acid.
XX
PS Disclosure; SEQ ID NO 6; 39pp; English.
XX
CC The present invention relates to fluorescently labeled nucleoside
CC triphosphate. The invention is useful for determining nucleic acid
CC sequence of target nucleic acid. The present sequence is a RNA used in
CC sequencing nucleic acids.
XX
SQ Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 20 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 677
AAT92356/c
ID AAT92356 standard; DNA; 22 BP.
XX
AC AAT92356;
XX
DT 26-JAN-1998 (first entry)
XX
DE Amino modified oligodeoxyribonucleotide.
XX
KW Amino modified oligodeoxyribonucleotide; oligonucleotide;
KW achiral linker reagent; 5-(aminomethyl)-1,3-benzenedimethanol;
KW N-fluoresceinyl-(5-aminomethyl)-1,3-benzenedimethanol;
KW hybridisation probe; PCR primer; nucleic acid sequencing;
KW affinity matrix; cloning recombinant DNA; in-vitro mutagenesis; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_difference 11 /*tag= a
FT /*note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
FT misc_difference 12 /*tag= b
FT /*note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
XX
WO9705156-A1.
XX
PD 13-FEB-1997.
XX
PF 26-JUL-1996; 96WO-DK000330.
XX
PR 27-JUL-1995; 95DK-00000863.
XX
PA (BEHR/) BEHRENS C.
PA (PETE/) PETERSEN K H.
PA (EGHO/) EGHOLM M.
PA (NIEL/) NIELSEN J.
PA (DAHL/) DAHL O.
XX
PI Behrens C, Petersen KH, Egholm M, Nielsen J, Dahl O;
XX
DR WPI; 1997-145615/13.
XX
PT New achiral linker reagents - useful for incorporation of multiple amino
PT gps. or reporter gps. into oligonucleotide(s).
XX
PS Disclosure; Page 20; 42pp; English.
XX
CC Achiral linker reagents have been developed for the incorporation of
CC multiple amino groups into oligonucleotides. The present sequence
CC represents a modified oligodeoxyribonucleotide. The achiral linker
CC reagents can be used for incorporation of multiple primary amino groups

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CC or reporter groups into oligonucleotides. They are compatible with
 CC conventional DNA synthesis following the phosphoramidite methodology, and
 CC can be incorporated in good yields. The linker reagents may be used for
 CC labelling of oligonucleotides. They may also be used for preparation of
 CC oligonucleotides, e.g. for use as hybridisation probes, for use as
 CC primers in the polymerase chain reaction or in nucleic acid sequencing
 CC reactions, for production of affinity matrices for purification of DNA
 CC binding proteins or other biomolecules, for production of affinity
 CC matrices for detection of nucleic acid sequences, for cloning recombinant
 CC DNA or for in-vitro mutagenesis

XX
 SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20; DB 1; Length 22;

Best Local Similarity 90.9%; Pred. No. 7.2e+02;

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730

|||||||

Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 678

ABK86172/C

ID ABK86172 standard; DNA; 24 BP.

XX

AC ABK86172;

XX

DT 24-SEP-2002 (first entry)

XX

DE Oligo dT primer #4 used in method to study gene expression.

XX

KW Oligo dT primer; gene expression analysis; primer; ss.

XX

OS Synthetic.

XX

PN WO200236828-A2.

XX

PD 10-MAY-2002.

XX

PF 01-NOV-2001; 2001WO-US045401.

XX

PR 01-NOV-2000; 2000US-0244933P.

XX

PA (GENO-) GENOMIC SOLUTIONS INC.

XX

PI Kane MD, Dombkowski AA, Nagel AC;

XX

PR WPI; 2002-508123/54.

XX

PT Identifying and characterizing gene expression in samples, for
 PT identifying mRNAs expressed at different levels, comprises employing an
 PT identifier having an oligo-dT primer of a specific sequence and a
 PT detectable marker at its 5' end.

XX

PS Example 1; Page 15; 45pp; English.

XX

XX The invention relates to systems for identification and characterisation
 CC of gene expression in one or more samples, comprising an identifier having
 CC a specific oligo-dT primer sequence, where the identifier comprises a
 CC detectable marker at its 5' end. The system is useful for identifying any
 CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
 CC as the relative differences in mRNA between 2 or more samples, where
 CC desired, for supporting discovery of new genes, and for identifying mRNAs
 CC that are expressed at different levels between 2 or more samples. The new
 CC system or method addresses limitations of prior methods by comprising
 CC compositions and systems that incorporate new strategies where molecular
 CC or biochemical assay compositions and systems are linked to DNA or RNA
 CC sequence databases for optimal resource efficiency in assaying gene
 CC expression. The system has the following advantages over existing
 CC methods: (a) prior sequence information or clone library construction is
 CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences

CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence in formation. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX Sequence 24 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 4 Other;

Query Match

Best Local Similarity 100.0%; Score 20; DB 1; Length 24;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||||

Db 24 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 679

ADG75987/C

ID ADG75987 standard; DNA; 24 BP.

XX

AC ADG75987;

XX

DT 11-MAR-2004 (first entry)

XX

DE Immunostimulatory non-CpG oligonucleotide IMT 059 SeqID 98.

XX

KW ss; non-CpG; immunostimulatory; non-palindromic; immune response;

XX

KW proliferation; differentiation; cytokine; antibody production; B-cell;

XX

KW plasmacytoid dendritic cell; immunomodulator; gene therapy;

XX

KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;

XX

OS Synthetic.

XX

PN WO2003101375-A2.

XX

PD 11-DEC-2003.

XX

PF 30-MAY-2003; 2003WO-EP005691.

XX

PR 30-MAY-2002; 2002CA-02388049.

XX

PA (IMMU-) IMMUNOTECH SA.

XX

PI Lopez RA;

XX

PR WPI; 2004-053333/05.

XX

PT New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX

PS Disclosure; Fig 3; 139pp; English.

XX

XX This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primates, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG

CC variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 0 A; 0 C; 4 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 7.5e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 680

AD26900
 ID AAD26900 standard; DNA; 25 BP.

XX
 AC AAD26900;

XX 09-APR-2002 (first entry)

XX Bacterial PNP DNA fragment with an in-frame polyA tract.

XX Hypermutable organism; dominant negative allele; mismatch repair gene;
 KW spontaneous mutation; DNA repair; purine nucleotide phosphorylase; PNP;
 KW Bacteria; ss.

OS Bacteria.
 OS Unidentified.
 OS Chimeric.

XX Key Location/Qualifiers

FT misc_feature 1..5 /*tag= a
 FT /note= "Bacterial PNP gene"
 FT misc_feature 6..25
 FT /*tag= a
 FT /note= "In-frame polyA tract"

XX WO200188192-A2.

XX 22-NOV-2001.

XX 14-MAY-2001; 2001WO-US015376.

XX 17-MAY-2000; 2000US-0204769P.

XX (UYJO) UNIV JOHNS HOPKINS.

XX (MORP-) MORPHOTEK INC.

XX (NICO/) NICOLAIDES N C.

XX (SASS/) SASS P M.

XX (GRAS/) GRASSO L.

XX (VOGE/) VOGELSTEIN B.

XX (KINZ/) KINZLER K W.

XX Nicolaides NC, SASS PM, Grasso L, Vogelstein B, Kinzler KW;

XX WPI; 2002-083004/11.

XX Generating mutation in gene using cells which contain defective mismatch
 PT repair gene, useful to generate genetically altered mutations with new
 PT output traits.

XX Example 5; Fig 7; 59pp; English.

XX The patent discloses a method for generating hypermutable organisms.
 CC Dominant negative alleles of human mismatch repair genes can be used to
 CC generate hypermutable cells and organisms. They increase the rate of
 CC spontaneous mutations by reducing the effectiveness of DNA repair and
 CC thereby render the cells or animals hypermutable. The method is used to
 CC produce genetically altered organisms to produce new output traits. The
 CC present sequence is a bacterial poly purine nucleotide phosphorylase
 CC (polyPNP) DNA fragment containing an in-frame polyA tract. This sequence

CC is used in the exemplification of the invention

XX Sequence 25 BP; 21 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 25;
 Best Local Similarity 100.0%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 6 AAAAAAAAAAAAAAAAAAAAAA 25

RESULT 681

ADH78589

XX ADH78589 standard; DNA; 25 BP.

XX AC ADH78589;

XX 22-APR-2004 (first entry)

XX Test element oligonucleotide #1.

XX Fluid functional property; fluid flow pattern;
 KW fluid reagent distribution; time dependent fluid reactivity; ss.

XX Synthetic.

XX US2003232343-A1.

XX 18-DEC-2003.

XX 14-JUN-2002; 2002US-00172675.

XX 14-JUN-2002; 2002US-00172675.

XX (LEPR/) LEPROUST E M.

XX (AMOR/) AMORESE D A.

XX (PECK/) PECK B J.

XX Leproust EM, Amorese DA, Peck BJ;

XX WPI; 2004-061269/06.

XX Determining a functional property of fluid in chamber by introducing a
 PT support comprising test elements having reaction and detection domains,
 PT introducing a test fluid, and detecting locations not reactive with the
 PT fluid.

XX Example 1; SEQ ID NO 1; 22pp; English.

XX The invention relates to a method of determining a functional property of
 CC a fluid in a chamber comprising introducing into the chamber a support to
 CC which is bound several test elements, each of the test elements
 CC comprising a reaction domain and a detection domain, introducing into the
 CC chamber a fluid that is interactive with the reaction domains, removing
 CC the fluid from the chamber, determining by means of the detection domains
 CC the locations at which the fluid has not interacted with the reaction
 CC domains, and relating the locations to the functional property of the
 CC fluid. The reaction domains involves nucleotides. The detection domain
 CC comprises a member of a specific binding pair. The determining of the
 CC step involves treating the test elements to modify only those reaction
 CC domains that have interacted with the fluid. The functional property is
 CC chosen from the flow pattern of the fluid, reagent distribution within
 CC the fluid and time dependent reactivity of the fluid. The method is
 CC useful for determining a functional property of a fluid in a chamber and
 CC for synthesising arrays of biopolymers e.g., arrays of polynucleotides.
 CC The method provides for the characterisation of a new fluid in a known
 CC flow cell, a known fluid in a new flow cell or a new fluid/flow cell
 CC combination. This sequence represents a test element used in the method
 CC of the invention.

XX Sequence 25 BP; 19 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 6 CTAAGAAAAA 25

RESULT 682
AED81293/C
ID AED81293 standard; DNA; 23 BP.
XX
AC AED81293;
XX
DT 26-JAN-2006 (first entry)
XX
DE IL-10 expression assay, test oligonucleotide SEQ ID No:51.
XX
KW pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO2005111057-A2.
XX
PD 24-NOV-2005.
XX
PF 04-APR-2005; 2005WO-US011827.
XX
PR 02-APR-2004; 2004US-0558951P.
XX
PA (COLB-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Vollmer J;
XX
DR WPI; 2005-786756/80.
XX
PT New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
PS Example; SEQ ID NO 51; 111pp; English.

CC The invention relates to an oligonucleotide having the formula: (a) 5'
CC XYN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XYN1YN2 3'
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by

CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen, and administering an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or alleviate an allergic response to the
CC allergen in the subject; (6) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
CC invention.

XX
SQ Sequence 23 BP; 0 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.8; DB 1; Length 23;
Best Local Similarity 91.3%; Pred. No. 7.5e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAA 2731
Db 23 AAAAAAAAAA 1

RESULT 683

AAH44623/C
ID AAH44623 standard; DNA; 24 BP.

XX
AC AAH44623;

XX
DT 16-NOV-2001 (first entry)

XX
DE Human PD 17 PCR primer 2 SEQ ID NO:4.

XX
KW Human; PD 17; cytostatic; virucidal; immunomodulatory; haemostatic;
KW antiinflammatory; gene therapy; malignant tumour; haemopathy;
KW human immunodeficiency virus infection; HIV infection;
KW immunological disease; inflammation; PCR primer; ss.

XX
OS Homo sapiens.

XX
PN WO200164729-A1.

XX
PD 07-SEP-2001.

XX
PF 26-FEB-2001; 2001WO-CN000221.

XX
PR 02-MAR-2000; 2000CN-00111869.

XX
PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.


```

XX PI Mao Y, Xie Y;
XX XX WPI; 2001-550164/61.
XX DR
XX PT New human polypeptide PD 17 for diagnosing and treating malignant tumor,
XX PT hemopathy, human immunodeficiency virus (HIV) infection, immunological
XX PT diseases and inflammations.
XX PS
XX PS Example 2; Page 11; 36pp; Chinese.
XX CC The present invention describes the human PD 17 protein (I). (I) has
XX CC cytotatic, virucidal, immunomodulatory, antiinflammatory and haemostatic
XX CC activities. The polynucleotide encoding (I) can be used in gene therapy.
XX CC (I) and the polynucleotide encoding it are applicable in the diagnosis
XX CC and treatment of malignant tumour, haemopathy, human immunodeficiency
XX CC virus (HIV) infection, immunological diseases and various inflammations.
XX CC The present sequence represents a PCR primer for human PD 17, which is
XX CC used in an example from the present invention
XX SQ Sequence 24 BP; 0 A; 2 C; 1 G; 21 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19.8; DB 1; Length 24;
Best Local Similarity 91.3%; Pred. No. 7.7e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 684
ID ABN86902/c
XX AC
XX AC ABN86902;
XX DT
XX DT 23-JUL-2002 (first entry)
XX DE Human macroprotein 21.78 PCR primer 2 SEQ ID NO:4.
XX KW Human; macroprotein 21.78; embryo development teratogenesis; tumour;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX XX CN1331245-A.
XX XX 16-JAN-2002.
XX PF
XX PF 30-JUN-2000; 2000CN-00116981.
XX PR
XX PR 30-JUN-2000; 2000CN-00116981.
XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX PI Mao Y, Xie Y;
XX XX WPI; 2002-292882/34.
XX XX
XX PT New polypeptide-human macroprotein 21.78 and polynucleotide encoding it,
XX PT for treating diseases such as embryo development teratogenesis and tumor.
XX PS
XX PS Example 2; Page 19 (Disclosure); 35pp; Chinese.
XX CC The present invention describes human macroprotein 21.78 (I). Also
XX CC described is a process for preparing (I) using DNA recombination
XX CC techniques. (I) and the polynucleotide sequence encoding it (II) can be
XX CC used in the treatment of diseases such as embryo development
XX CC teratogenesis and tumours. The present sequence represents a PCR primer
XX CC for (I), which is used in an example from the present invention
XX SQ Sequence 24 BP; 0 A; 1 C; 2 G; 21 T; 0 U; 0 Other;

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Query Match 0.7%; Score 19.8; DB 1; Length 24;
Best Local Similarity 91.3%; Pred. No. 7.7e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 685
ID AAQ75648/c
XX AC
XX AC AAQ75648;
XX DT
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX XX
XX XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX XX
XX XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX XX
XX XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX XX
XX PS Disclosure; Page 6; lipp; Japanese.
XX CC
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 TACAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 686
ID AAQ75675/c
XX AC
XX AC AAQ75675;
XX DT
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;

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AAQ75643/c
XX ID AAQ75643 standard; DNA; 21 BP.
XX AC AAQ75643;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
DB 21 CTACAAAAA 1

RESULT 690
AAQ75625/c
XX ID AAQ75625 standard; DNA; 21 BP.
XX AC AAQ75625;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
DB 21 CTACAAAAA 1

RESULT 690
AAQ75646/c
XX ID AAQ75646 standard; DNA; 21 BP.
XX AC AAQ75646;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
DB 21 ACTAAAAA 1

RESULT 691
AAQ75646/c
XX ID AAQ75646 standard; DNA; 21 BP.
XX AC AAQ75646;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

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XX FA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
DB 21 ACTAAAAA 1

RESULT 691
AAQ75646/c
XX ID AAQ75646 standard; DNA; 21 BP.
XX AC AAQ75646;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

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```

Query Match      0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2704 GTACTAAAAA 2724
DB 21 GTACAAAAA 1

RESULT 692
AAQ75753/c
ID AAQ75753 standard; DNA; 21 BP.
XX
AC AAQ75753;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2725
DB 21 TATTAAAAA 1

RESULT 694
AAQ75680/c
ID AAQ75680 standard; DNA; 21 BP.
XX
AC AAQ75680;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of

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OS Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 701
AAQ75616/c
ID AAQ75616 standard; DNA; 21 BP.
XX
XX AAQ75616;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TACCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 702
AAQ75696/c
ID AAQ75696 standard; DNA; 21 BP.
XX
XX AAQ75696;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TACTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 703
AAQ75721/c
ID AAQ75721 standard; DNA; 21 BP.

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XX AC AAQ75721;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX XX 01-NOV-1994.
XX PD 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PA WPI; 1995-018287/03.
XX DR Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Dn 21 ACTAAAAA 1

RESULT 704
AAQ75744/c
ID AAQ75744 standard; DNA; 21 BP.
AC AAQ75744;
XX 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

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XX WPI; 1995-018287/03.
XX DR Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAA 2725
Dn 21 TACGAAAA 1

RESULT 705
AAV35395
ID AAV35395 standard; DNA; 21 BP.
XX AC AAV35395;
XX DT 13-OCT-1998 (first entry)
XX DE HIV-1 gag protein DNA primer #8.
XX KW Hypervariable region; ENV protein; vaccinia virus; gag gene; retrovirus;
XX KW vaccines; infection; protection; primer; ss.
XX OS Synthetic.
XX PN WO9822596-A1.
XX PD 28-MAY-1998.
XX PF 19-NOV-1997; 97WO-JP004216.
XX PR 19-NOV-1996; 96JP-00323412.
XX PA (NINA-) JAPAN NAT INST INFECTIOUS DISEASES.
XX PA (JAFG ) NIPPON ZEON KK.
XX PI Kojima A, Kurata T, Yasuda A;
XX DR WPI; 1998-312481/27.
XX PT Recombinant vaccinia virus containing fusion HIB gag gene - for
XX PT production in host cells of gag protein for use as vaccine.
XX PS Example 1; Page 66; 84pp; Japanese.
XX CC AAV35388-V35414 are primers used in a method which results in a
XX CC recombinant vaccinia virus comprising of a gag gene from a retrovirus
XX CC such as HIV-1 or HIV-2, fused to a DNA fragment containing an epitope
XX CC region (30-300 bases in length) of a retroviral gene other than the gag
XX CC gene. The gag gene may be altered so as to produce a gag protein modified
XX CC from the natural sequence by the addition, deletion or substitution of at
XX CC least 1 amino acid residue. The fusion gene is inserted into a region of
XX CC a vaccinia virus not essential to its propagation, to give a recombinant
XX CC vaccinia virus vector which is used to transform a host cell (such as
XX CC HeLa, Vero, VEF, rabbit kidney RK13 or human myeloma TK-143 cells). Upon

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KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2705 TACTAAAAA 2725
XX ||| |||||
XX Db 21 TACAAAAA 1
XX
XX RESULT 709
XX ADK01314/c
XX ID ADK01314 standard; DNA; 21 BP.
XX
XX AC ADK01314;
XX
XX XX 06-MAY-2004 (first entry)
XX DT

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XX Rat DNA microarray capture oligonucleotide #34.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (bio)molecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2707 CTAAAAA 2727
XX ||| |||||
XX Db 21 CTCAAAAA 1
XX
XX RESULT 710
XX ADK01333/c
XX ID ADK01333 standard; DNA; 21 BP.

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XX AC ADK01333;
XX ADK01340/c
XX DT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #53.
XX DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX KW Rattus sp.
XX OS DE10208794-A1.
XX PN 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PA Boekenkamp D, Dieck HT, Hoppe H;
XX PI WPI; 2003-714082/68.
XX PT
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 TCAAAAAAAAAAAAAAAAAAAAAA 1

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RESULT 711
ADK01340/c
XX ADK01340 standard; DNA; 21 BP.
XX AC ADK01340;
XX DT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #60.
XX DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX KW Rattus sp.
XX OS DE10208794-A1.
XX PN 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PA Boekenkamp D, Dieck HT, Hoppe H;
XX PI WPI; 2003-714082/68.
XX PT
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 6; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
    | | | | | | | | | | | | | | | |
Db 21 AGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 712
ADK01284/C
ID ADK01284 standard; DNA; 21 BP.
XX
AC ADK01284;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #4.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
PN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 4; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
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```
Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2726
    | | | | | | | | | | | | | | | |
Db 21 ATTTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 713
ADK01293/C
ID ADK01293 standard; DNA; 21 BP.
XX
AC ADK01293;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #13.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
PN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
```

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19.4; DB 1; Length 21;

Beat Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2708 TAAAAA 2728

DB 21 TATATA 1

RESULT 714

ADK01328/C
ID ADK01328 standard; DNA; 21 BP.

XX AC ADK01328;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #48.

XX KW ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX XX 28-FEB-2002; 2002DE-01008794.

XX XX 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX PS Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It

CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19.4; DB 1; Length 21;

Beat Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2709 AAAAAA 2729

DB 21 AAGAAAAA 1

RESULT 715

ADK01337/C

ID ADK01337 standard; DNA; 21 BP.

XX AC ADK01337;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #57.

XX KW ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX XX 28-FEB-2002; 2002DE-01008794.

XX XX 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX PS Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food

CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible; ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728

DB 21 TGAIAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 716

ADK01282/c

ID ADK01282 standard; DNA; 21 BP.

AC ADK01282;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #2.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible; ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAIAAAAAAAAAAAAAAAAAA 2727

DB 21 CTTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 717

ADK01334/c

ID ADK01334 standard; DNA; 21 BP.

AC ADK01334;

XX 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #54.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
 Db 21 CCAAAAAA 1

RESULT 718
 ADK01296/c
 ID ADK01296 standard; DNA; 21 BP.
 XX
 AC ADK01296;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 DE Rat DNA microarray capture oligonucleotide #16.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 XX DE10208794-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 XX Boekenkamp D, Dieck HT, Hoppe H;
 XX
 XX WPI; 2003-714082/68.
 XX
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 5; 8pp; German.

This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture

agents are particularly locked nucleic acids (LNA) and the anchor region comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
 Db 21 AATAAAAAA 1

RESULT 719
 ADK01338/c
 ID ADK01338 standard; DNA; 21 BP.
 XX
 AC ADK01338;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 DE Rat DNA microarray capture oligonucleotide #59.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 XX DE10208794-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 XX Boekenkamp D, Dieck HT, Hoppe H;
 XX
 XX WPI; 2003-714082/68.
 XX
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 6; 8pp; German.

This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture

CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX
 SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2727
 DB 21 CGAAAAAAGAAAAA 1

RESULT 720
 ADK01320/c

ID ADK01320 standard; DNA; 21 BP.

AC ADK01320;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #40.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAGAAAAA 2726

DB 21 ACGAAAAAAGAAAAA 1

RESULT 721

ADK01304/c

ID ADK01304 standard; DNA; 21 BP.

XX ADK01304;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #24.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

```

XX Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (biomolecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
DB 21 ACCAAAAAAAAAAAAAAAAAAAAA 1

RESULT 722
ADK01325/c
XX ID ADK01325 standard; DNA; 21 BP.
XX AC ADK01325;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #45.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.

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XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (biomolecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
DB 21 TAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 723
ADK01292/c
XX ID ADK01292 standard; DNA; 21 BP.
XX AC ADK01292;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #12.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX

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XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acids in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
Db | | | | | | | | | | | | | | | | | | | |
21 AGTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 724
ADK01312/c
XX ID ADK01312 standard; DNA; 21 BP.
XX AC ADK01312;
XX DT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #32.
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX XX DE10208794-A1.
XX PN 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF

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XX PR 28-FEB-2002; 2002DE-01008794.
XX XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PA Boekenkamp D, Dieck HT, Hoppe H;
XX PI WPI; 2003-714082/68.
XX DR Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acids in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db | | | | | | | | | | | | | | | | | | | |
21 AACAAAAAAAAAAAAAAAAAAAAA 1

RESULT 725
ADK01298/c
XX ID ADK01298 standard; DNA; 21 BP.
XX AC ADK01298;
XX DT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #18.
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX XX DE10208794-A1.
XX PN

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XX PD 04-SEP-2003.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PF Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
DB 21 CTCACAAAAA 1

RESULT 726
ADK01336/c
ID ADK01336 standard; DNA; 21 BP.
XX AC ADK01336;
XX 06-MAY-2004 (first entry)
XX Rat DNA microarray capture oligonucleotide #56.
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.

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XX OS Rattus sp.
XX PN DE10208794-A1.
XX XX 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PF Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 6; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
DB 21 ACACAAAAA 1

RESULT 727
ADW71579
ID ADW71579 standard; DNA; 21 BP.
XX AC ADW71579;
XX 21-APR-2005 (first entry)
XX DT
XX

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DE Oligonucleotide DS21mer(C-C) .
XX DNA detection; ds.
XX Unidentified.
XX Key Location/Qualifiers
FH misc_feature 11 /*tag= a
FT /note= "Paired with a cytosine on the opposite strand via
FT Non-Watson-Crick base pairing"
XX WO2005010177-A1.
XX 03-FEB-2005.
XX 20-JUL-2004; 2004WO-JP010300.
XX 25-JUL-2003; 2003JP-00201500.
XX 26-FEB-2004; 2004JP-00051320.
XX (ONOA/) ONO A.
XX Ono A;
XX WPI; 2005-162557/17.
XX Complex useful for detecting non-Watson Crick base pair in double
XX stranded DNA, comprises first and second single stranded nucleic acid or
XX its derivative and metal ion.
XX Example 1; Page 32; 73pp; Japanese.
XX The invention relates to a complex (C1) comprising a first and second
XX single stranded nucleic acid or its derivative and a metal ion, where the
XX first and second base of the strands forms a bond with metal ion. Also
XX included are detecting the existence of thymine-thymine, cytosine-
XX cytosine or cytosine-thymine base pair in a DNA or its analog (involving
XX melting DNA or its analog in an aqueous medium, processing the solution
XX for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+
XX and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and
XX comparing the characteristics of the solution, where change in
XX characteristics in Hg(II)2+, Ag+ and combinations of Hg(II)2+ and Ag+
XX represents the existence of T-T base pair, C-C base pair and C-T base
XX pair in the respective DNA solutions) and an agent (Al) for detecting a
XX metal ion (comprising one or more DNA molecules or their analogs having a
XX metal binding region, where the coupling of metal ion is detected by
XX analyzing the characteristic change in DNA). The complex (C1) is useful
XX as a non-Watson Crick base pair metal complex or for detecting non-Watson
XX Crick base pair in a double stranded DNA. The complex (C1) enables to
XX detect non-Watson Crick base pair in a double stranded DNA. The present
XX sequence is a 21mer double stranded oligonucleotide with 1 Non-Watson-
XX Crick base paring.
XX Sequence 21 BP; 20 A; 1 C; 0 G; 0 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 1 AAAAAAAAAACAAAAAAAAAAAA 21
RESULT 728
ADW71578
ID ADW71578 standard; DNA; 21 BP.
XX AC ADW71578;
XX 21-APR-2005 (first entry)
XX

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DE Oligonucleotide DS21mer(T-T) .
XX DNA detection; ds.
XX Unidentified.
XX Key Location/Qualifiers
FH misc_feature 11 /*tag= a
FT /note= "Paired with a thymine on the opposite strand via
FT Non-Watson-Crick base pairing"
XX WO2005010177-A1.
XX 03-FEB-2005.
XX 20-JUL-2004; 2004WO-JP010300.
XX 25-JUL-2003; 2003JP-00201500.
XX 26-FEB-2004; 2004JP-00051320.
XX (ONOA/) ONO A.
XX Ono A;
XX WPI; 2005-162557/17.
XX Complex useful for detecting non-Watson Crick base pair in double
XX stranded DNA, comprises first and second single stranded nucleic acid or
XX its derivative and metal ion.
XX Example 1; Page 32; 73pp; Japanese.
XX The invention relates to a complex (C1) comprising a first and second
XX single stranded nucleic acid or its derivative and a metal ion, where the
XX first and second base of the strands forms a bond with metal ion. Also
XX included are detecting the existence of thymine-thymine, cytosine-
XX cytosine or cytosine-thymine base pair in a DNA or its analog (involving
XX melting DNA or its analog in an aqueous medium, processing the solution
XX for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+
XX and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and
XX comparing the characteristics of the solution, where change in
XX characteristics in Hg(II)2+, Ag+ and combinations of Hg(II)2+ and Ag+
XX represents the existence of T-T base pair, C-C base pair and C-T base
XX pair in the respective DNA solutions) and an agent (Al) for detecting a
XX metal ion (comprising one or more DNA molecules or their analogs having a
XX metal binding region, where the coupling of metal ion is detected by
XX analyzing the characteristic change in DNA). The complex (C1) is useful
XX as a non-Watson Crick base pair metal complex or for detecting non-Watson
XX Crick base pair in a double stranded DNA. The complex (C1) enables to
XX detect non-Watson Crick base pair in a double stranded DNA. The present
XX sequence is a 21mer double stranded oligonucleotide with 1 Non-Watson-
XX Crick base paring.
XX Sequence 21 BP; 20 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 1 AAAAAAAAAATAAAAAAAAAAAA 21
RESULT 729
AED42748
ID AED42748 standard; RNA; 21 BP.
XX AC AED42748;
XX 15-DEC-2005 (first entry)
XX

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DE Protein interacting gene transcript siRNA sense oligo #173.

KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;

KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;

KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;

KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;

KW protein microarray; cancer; familial adenomatous polyposis;

KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;

KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;

KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;

KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;

KW muscular dystrophy; ss; short interfering RNA; RNA interference;

KW gene silencing.

XX Unidentified; Synthetic.

OS

XX

XX Key Location/Qualifiers

FH misc_feature 20..21

FT /*tag= a

FT /note= "3' overhang comprising two 2'-deoxythymine

FT residues linked by a 5'-3' phosphodiester linkage"

XX

XX US2005222029-A1.

XX

XX 06-OCT-2005.

XX

XX 07-MAR-2005; 2005US-00075234.

XX

XX 04-JAN-2001; 2001US-0259571P.

XX 04-JAN-2001; 2001US-0259573P.

XX 14-MAR-2001; 2001US-0276259P.

XX 15-MAR-2001; 2001US-0276179P.

XX 19-MAR-2001; 2001US-0277013P.

XX 16-APR-2001; 2001US-0284095P.

XX 17-APR-2001; 2001US-0284220P.

XX 17-APR-2001; 2001US-0284404P.

XX 19-APR-2001; 2001US-0285324P.

XX 30-APR-2001; 2001US-0287513P.

XX 10-JUL-2001; 2001US-0304101P.

XX 23-JUL-2001; 2001US-0307233P.

XX 22-OCT-2001; 2001US-0347829P.

XX 25-OCT-2001; 2001US-034818P.

XX 04-JAN-2002; 2002US-00035344.

XX 07-JAN-2002; 2002US-0346384P.

XX 17-JAN-2002; 2002US-0349843P.

XX 06-FEB-2002; 2002US-0354899P.

XX 14-MAR-2002; 2002US-00098979.

XX 14-MAR-2002; 2002US-00099324.

XX 18-MAR-2002; 2002US-00100503.

XX 15-APR-2002; 2002US-00122573.

XX 17-APR-2002; 2002US-00124550.

XX 17-APR-2002; 2002US-00124767.

XX 18-APR-2002; 2002US-00125639.

XX 29-APR-2002; 2002US-00135802.

XX

PA (MYRI-) MYRIAD GENETICS INC.

XX

XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Reichman K;

XX

XX WPI; 2005-664172/68.

XX

XX New isolated protein complex having a first protein interacting with a

PT second protein, useful for treating or preventing, e.g. cancer, ischemia,

PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.

XX

XX Disclosure; Fig 62; 198pp; English.

PS

XX The invention relates to a novel isolated protein complex having a first

CC protein interacting with a second protein. The invention further

CC comprises: a protein microarray comprising the protein complex; a method

CC for selecting modulators of the protein complex; a method of selecting

CC modulators of an interaction between a first protein and a second protein

CC ; and the treating and/or preventing of diseases and disorders associated

CC with the protein complexes. The protein complexes are useful in screening

CC assays for identifying compounds effective in modulating the protein

CC complexes, and in treating and/or preventing diseases and disorders

CC associated with the protein complexes. The diseases and disorders include

CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,

CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,

CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,

CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This

CC sequence represents an siRNA oligo which targets the transcript of a

CC protein forming part of a protein-protein complex of the invention.

XX

SQ Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 76.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1063 CCACGGATCTGACTACTCACT 1083

|||||:||||:||||

Db 1 CCACGGAUCUGACUACUATT 21

RESULT 730

AAT68615/C

ID AAT68615 standard; DNA; 24 BP.

XX

AC AAT68615;

XX

XX 20-FEB-1998 (first entry)

XX

DE DNA probe used in fingerprinting technique.

XX

KW probe; screening; fingerprinting; assay; 3' termini; hybridisation; ss.

OS Synthetic.

XX

PN EP78351-A2.

XX

XX 11-JUN-1997.

PD

XX

PF 26-NOV-1996; 96EP-00118921.

XX

PR 30-NOV-1995; 95JP-00311949.

XX

XX (HITA) HITACHI LTD.

PA

XX Kambara H, Okano K, Uematsu C;

PI

XX WPI; 1997-300347/28.

DR

XX

XX Nucleic acid assay methods - based on restriction fragment length

PT determination.

PT

XX Example 1; Page 7; 21pp; English.

PS

XX The present sequence is a DNA probe used in a novel method of analysis or

CC assay for nucleotides, which comprises: (i) digesting DNA with a

CC restriction enzyme; (ii) discriminating a difference in sequences of the

CC DNA fragments obtained around the 3' termini with a DNA probe and

CC extending the DNA probe by a complementary strand synthesis to

CC fractionate the DNA fragments into groups; and (iii) measuring lengths of

CC the DNA fragments which belong to the groups, or length of the extended

CC DNA probe, and using the lengths obtained for the fragments around the 3'

CC termini as fingerprints. Where polyA is present, the presence of

CC recognition sequence CCG is critical for clarifying the terminal site,

CC this is because the length of polyA cannot be controlled. The method is

CC useful for assaying a large number of cDNA molecules or DNA fragments and

CC for assaying long DNA sequences

XX

SQ Sequence 24 BP; 0 A; 2 C; 1 G; 19 T; 0 U; 2 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 24;

Best Local Similarity 95.2%; Pred. No. 8.1e+02;


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Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
DB 21 CGAAAAA 1

RESULT 731
AAZ00877/c
ID AAZ00877 standard; DNA; 24 BP.
XX AC AAZ00877;
XX XX
XX 27-SEP-1999 (first entry)
XX XX
XX PCR primer PGRT32 for PGI coding sequence.
XX XX
XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX KW cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX KW PSA; human; ss.
XX XX
XX Synthetic.
XX OS Homo sapiens.
XX XX
XX WO9932644-A2.
XX PN
XX 01-JUL-1999.
XX PD
XX 22-DEC-1998; 98WO-18002133.
XX PF
XX 22-DEC-1997; 97US-00996306.
XX PR
XX 09-SEP-1998; 98US-0099658P.
XX XX
XX (GEST ) GENSET.
XX PA
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX PI
XX WPI; 1999-405178/34.
XX DR
XX Use of a prostate cancer associated gene and biallelic markers derived
XX PT from it.
XX PT
XX Example 6; Page 42; 385pp; English.
XX PS
XX The invention relates to a mammalian PGI gene and protein, and a set of
XX CC PGI biallelic markers. The PGI polynucleotide and biallelic markers are
XX CC used in a hybridisation assay, a sequencing assay, or in an allele-
XX CC specific amplification assay for determining the identity of a nucleotide
XX CC at a PGI-related biallelic marker. The methods can be used to detect and
XX CC to assess the risk of developing cancer or prostate cancer. Early-stage
XX CC diagnosis of prostate cancer relies on prostate specific antigen (PSA)
XX CC dosage. However, the effectiveness of this is limited due to its
XX CC inability to discriminate between malignant and non-malignant affections
XX CC of the organ. A need exists for both a reliable diagnostic procedure
XX CC which would enable early-stage diagnosis, and for preventative and
XX CC curative treatments of the disease. The PGI gene can be used for
XX CC detection of prostate cancer, and the risk of developing it in the
XX CC future, and can also be used to determine therapies for the disease
XX CC
XX SQ Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 95.2%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA 2728
DB 21 TCAAAAA 1

RESULT 732
ABK12409
ID ABK12409 standard; DNA; 24 BP.

```

```

XX AC ABK12409;
XX XX
XX 18-JUN-2002 (first entry)
XX DE
XX RT-PCR primer #1 for cDNA encoding polypeptide-laminin B210.67.
XX KW Polypeptide-laminin B210.67; embryo development teratogenesis;
XX KW cytotatic; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX OS
XX Unidentified.
XX PN CN1328013-A.
XX XX
XX 26-DEC-2001.
XX PF
XX 14-JUN-2000; 2000CN-00116514.
XX XX
XX 14-JUN-2000; 2000CN-00116514.
XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX XX
XX Mao Y, Xie Y;
XX PI
XX WPI; 2002-270054/32.
XX DR
XX Polypeptide-laminin B210.67, useful for treating diseases such as embryo
XX PT development teratogenesis.
XX PS
XX Example 2; Page 18 (disclosure); 33pp; Chinese.
XX XX
XX The present invention relates to the isolation of polypeptide-laminin
XX CC B210.67, and the polynucleotide encoding it. Also described is the
XX CC process for preparing the protein by DNA recombination. The polypeptide
XX CC is useful for treating diseases such as embryo development teratogenesis.
XX CC The present sequence for reverse transcriptase (RT)-PCR primer #1 is used
XX CC with RT-PCR primer #2 (ABK12410) for isolating cDNA encoding polypeptide-
XX CC laminin B210.67
XX XX
XX SQ Sequence 24 BP; 19 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 95.2%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2727
DB 4 CTTAAAAA 24

RESULT 733
ABZ23536
ID ABZ23536 standard; DNA; 24 BP.
XX AC
XX ABZ23536;
XX XX
XX 07-APR-2003 (first entry)
XX DT
XX fragment of a plasmid used to detect somatic instability.
XX DE
XX Replication error; drug development; somatic instability; ss.
XX KW
XX Synthetic.
XX OS
XX Key Location/Qualifiers
XX FH misc_feature 4
XX FT /*tag= a
XX FT /note= "this base represents an unspecified number of
XX FT bases"
XX FT 21
XX FT misc_feature
XX FT /*tag= b
XX FT /note= "this base represents an unspecified number of
XX FT bases"
XX FT

```

```

XX PN W0200295071-A2.
XX PD 28-NOV-2002.
XX PF 22-MAY-2002; 2002WO-NL000322.
XX PR 22-MAY-2001; 2001EP-00201936.
XX PA (NEW-) KONINK NEDERLANDSE AKAD VAN WETENSCHAPPE.
XX PA (TIJS/) TIJSTERMAN M.
XX PI Plasterk RHA, Tijsterman M;
XX WPI; 2003-129440/12.
XX DR
XX PT Determining whether a product of a gene is involved in preventing a
XX PT replication error in a cell comprises providing a specific inhibitor for
XX PT the product and determining the level of expression of a marker gene.
XX PS Example 1; Fig 3; 47pp; English.
XX CC The specification describes a method for determining whether a product of
XX CC a gene is involved in preventing a replication error in a cell. The
XX CC method comprises providing the cell with a specific inhibitor for the
XX CC product and determining the level of functional expression of a marker
XX CC gene in the cell, where the level of expression of the marker gene is
XX CC dependent on the occurrence of the replication error. The method is used
XX CC for determining whether a product of a gene is involved in preventing a
XX CC replication error in a cell. The identified genes are useful for
XX CC developing diagnostic tools, or as targets for drug development to
XX CC manipulate cells on the basis of the presence or absence of function of
XX CC the gene. AB223535-36 represents fragments of plasmids used to detect
XX CC somatic instability, in the course of the invention
XX SQ Sequence 24 BP; 20 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
XX
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2708 TAAAAA
Db 2 TGNAAAAA
24

RESULT 734
ADR44221
ID ADR44221 standard; DNA; 24 BP.
AC
AC ADR44221;
DT 04-NOV-2004 (first entry)
XX
XX Caenorhabditis elegans heat-shock promoter DNA #2.
XX Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
XX Caenorhabditis elegans.
XX
XX Key Location/Qualifiers
XX misc_feature 4 /*tag= a
XX /note= "N can be repeated X times"
XX misc_feature 21 /*tag= b
XX /note= "N can be repeated Y times"
XX
XX US2004161782-A1.
XX
XX 19-AUG-2004.
XX
XX 21-NOV-2003; 2003US-00719995.

```

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XX 22-MAY-2001; 2001EP-00201936.
XX 22-MAY-2002; 2002WO-NL000322.
XX 28-NOV-2002; 2002WO-WO095071.
XX (TIJS/) TIJSTERMAN M.
XX PA (PLAS/) PLASTERK R H A.
XX PI Tijsterman M, Plasterk RHA;
XX WPI; 2004-603554/58.
XX
XX Determining if a gene product/compound is involved in preventing
XX PT replication error in a cell, useful for treating cancer, comprises
XX PT determining expression level of a marker gene in a cell treated with a
XX PT gene product inhibitor/compound.
XX PS Disclosure; Fig 3; 25pp; English.
XX CC The present invention relates to a method for determining if a gene
XX CC product or compound is involved in preventing replication error in a
XX CC cell. The method involves providing a cell with a specific inhibitor for
XX CC a gene product or with a compound and determining the expression level of
XX CC a marker gene in the cell, where the expression level of the marker gene
XX CC is dependent on the occurrence of a replication error. The invention is
XX CC useful in gene therapy and for treating a subject having tumours or
XX CC cancer. The present sequence is a Caenorhabditis elegans heat-shock
XX CC promoter DNA. This sequence is used to illustrate the method of
XX CC invention.
XX SQ Sequence 24 BP; 20 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
XX
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2708 TAAAAA
Db 2 TGNAAAAA
24

RESULT 735
ACC48482/c
ID ACC48482 standard; DNA; 21 BP.
XX
XX ACC48482;
XX
XX 11-AUG-2003 (first entry)
XX
XX Locked nucleic acid anchored oligo(I) primer ON12.
XX Locked nucleic acid; LNA; gene therapy; primer; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= locked nucleic acid"
XX modified_base 3
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= locked nucleic acid"
XX modified_base 5
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= locked nucleic acid"
XX modified_base 7
XX /*tag= d
XX /mod_base= OTHER
XX /note= "OTHER= locked nucleic acid"
XX modified_base 9

```

```
FT      /*tag= e
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      11
FT      /*tag= f
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      13
FT      /*tag= g
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      15
FT      /*tag= h
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      17
FT      /*tag= i
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      19
FT      /*tag= j
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      21
FT      /*tag= k
FT      /mod_base= OTHER
FT      /note= "OTHER= locked nucleic acid"
FT      22
FT      /*tag= l
FT      /mod_base= OTHER
FT      /note= "OTHER= Compound 17d"
FT
XX      WO2003020739-A2.
XX
XX      13-MAR-2003.
XX
XX      04-SEP-2002; 2002WO-IB003911.
XX
XX      04-SEP-2001; 2001US-0317034P.
XX      22-SEP-2001; 2001US-0323967P.
XX
XX      (EXIQ-) EXIQON AS.
XX
XX      Wengel J, Kauppinen S;
XX      WPI; 2003-363021/34.
XX
XX      Novel nucleic acid comprising a locked nucleic acid unit having a
XX      modified base that comprises an optionally substituted carbocyclic aryl
XX      moiety, or modified nucleobase or nucleosidic base other than
XX      oxazole/imidazole.
XX
XX      Example 24a; Page 90; 119pp; English.
XX
XX      The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
XX      oligo(dT) primer ON12, which was used in first-strand cDNA synthesis from
XX      eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
XX      on an LNA-type 2',4'-C-methylene- beta-D-ribofuranosyl moiety. It is
XX      one of a set of such primers (see also ACC48483-85) that were used in an
XX      example from the invention to demonstrate improved reverse transcription
XX      of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
XX      were observed: efficient priming on mRNAs with short poly(A) tails;
XX      efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
XX      units resulting in an improved T20-VN anchor primer and thus avoiding
XX      reverse transcription of long poly(A) tracts; and improved reverse
XX      transcription of eukaryotic poly(A)-RNA directly from total RNA extracts
XX      due to increased specificity. The invention relates to modified LNA units
XX      that comprise unique base groups. Desirable nucleobase and nucleosidic
XX      base substitutions can mediate universal hybridisation when incorporated
XX      into nucleic acid strands. The novel LNA compounds can be used e.g. as
XX      PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
XX      and in diagnostics
```

```
SQ      Sequence 21 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 2 Other;
Query Match      0.7%; Score 19.2; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. NO. 7.9e+02;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAAA 2727
Db      20 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 736
ACC99729/c
ID      ACC99729 standard; DNA; 21 BP.
XX
XX      AC      ACC99729;
XX
XX      DT      02-SEP-2003 (first entry)
XX      DE      Oligonucleotide.
XX      KW      Multiplex real-time quantitative PCR; PCR primer; copy number;
XX      KW      Alzheimer's disease; ss.
XX      OS      Synthetic.
XX      PN      WO2003048377-A2.
XX      PD      12-JUN-2003.
XX      PF      02-DEC-2002; 2002WO-US038806.
XX      PR      30-NOV-2001; 2001US-0336095P.
XX      PR      19-JUL-2002; 2002US-0397475P.
XX
XX      (UYRP ) UNIV ROCHESTER.
XX      (THER/) THERIANOS S.
XX
XX      Zhu M, Coleman P;
XX      WPI; 2003-S32841/50.
XX
XX      Determining the relative copy number of a group of target nucleic acid
XX      molecules present in a sample by performing a first or second PCR in a
XX      PCR mixture and quantifying the number of copies of the second target
XX      nucleic acid product.
XX
XX      Example 1; Page 68; 118pp; English.
XX
XX      The present invention describes a multiplex real-time quantitative PCR
XX      method for determining the relative copy number of a group of target
XX      nucleic acid molecules present in a sample. The method comprises: (1)
XX      performing a first PCR in a PCR mixture; (2) performing a second PCR in a
XX      PCR mixture; and (3) quantifying the number of copies of the second
XX      target nucleic acid product present in the sample containing the target
XX      nucleic acid molecule. Also described: (1) quantifying the copy number of
XX      a group of target nucleic acids in a sample; and (2) determining whether
XX      a subject is at risk of acquiring Alzheimer's disease. The method is
XX      useful for determining the relative copy number of a group of target
XX      nucleic acid molecules present in a sample for determining whether a
XX      subject is at risk of acquiring Alzheimer's disease. ACC99620 to ACC99730
XX      represent PCR primer used in the exemplification of the present invention
XX
XX      Sequence 21 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 2 Other;
Query Match      0.7%; Score 19.2; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. NO. 7.9e+02;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAAA 2727
Db      20 BAAAAAAAAAAAAAAAAAAAAA 1
```


XX PD 11-JUL-2002.
 XX PF 14-DEC-2001; 2001WO-US048458.
 XX PR 14-DEC-2000; 2000US-0255534P.
 XX PA (COLE-) COLEY PHARM GROUP INC.
 XX PI Bratzler RL;
 XX XX WPI; 2002-566690/60.
 XX XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX XX Claim 2; Page 20; 276pp; English.
 XX CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma, and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAGAGAGAAAAA 1
 RESULT 740
 ABA99264/c
 ID ABA99264 standard; DNA; 24 BP.
 AC ABA99264;
 XX 08-MAY-2002 (first entry)
 DT Human tra oncogene 10-56 RT-PCR primer 2.
 DE
 XX Oncogene; tra oncogene 10.56; human; treatment; gene therapy; cytostatic;
 KW haemostatic; virucide; immunomodulatory; antiinflammatory; diagnosis;
 KW malignant tumour; haenopathy; human immunodeficiency virus;
 KW HIV infection; immunological disease; inflammation; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200200824-A2.
 PN 03-JAN-2002.
 XX
 XX 11-JUN-2001; 2001WO-CN000936.
 XX
 PR 12-JUN-2000; 2000CN-00116436.
 XX (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
 PA Mao Y, Xie Y;
 PI
 XX

DR WPI; 2002-075668/10.
 XX human tra oncogene 10.56 and encoding polynucleotide, used in diagnosis
 PT and treatment of malignant tumors, hemopathy, human immunodeficiency
 PT virus infection, immunological diseases and inflammation.
 XX
 PS Example 2; Page 12; 32pp; Chinese.
 XX
 CC This invention describes a novel human tra oncogene 10.56 which has
 CC cytostatic, haemostatic, virucide, immunomodulatory and antiinflammatory
 CC activity and can be used for gene therapy. The polypeptide of the
 CC invention and its encoding polynucleotide are used in diagnosis and
 CC treatment of malignant tumors, haemopathy, human immunodeficiency virus
 CC (HIV) infection, immunological diseases and various inflammations. This
 CC sequence represents an RT-PCR primer used in the amplification of the
 CC human tra oncogene 10.56 gene which is described in the disclosure of the
 CC invention
 XX
 SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAGAGAGAAAAA 1
 RESULT 741
 ABK13715/c
 ID ABK13715 standard; DNA; 24 BP.
 XX
 AC ABK13715;
 XX
 DT 23-APR-2002 (first entry)
 XX
 DE RT-PCR primer #2 for human transcriptional activation subunit 14 cDNA.
 XX
 KW Human; transcriptional activation subunit 14; malignant neoplasm;
 KW haematopathy; cytostatic; HIV infection; human immunodeficiency virus;
 KW immunological disease; inflammation; virucide; immunomodulatory;
 KW antiinflammatory; reverse transcriptase-PCR; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200194403-A1.
 PN 13-DEC-2001.
 PD
 XX 14-MAY-2001; 2001WO-CN000753.
 PF
 XX 16-MAY-2000; 2000CN-00115720.
 PR (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
 PA
 XX Mao Y, Xie Y;
 XX
 XX WPI; 2002-090139/12.
 DR
 XX Human transcriptional activation subunit 14 and encoding polynucleotide,
 PT used in diagnosis and treatment of malignant tumors, hemopathy, human
 PT immunodeficiency virus infection, immunological diseases and
 PT inflammation.
 XX
 PS Example 2; Page 17; 36pp; Chinese.
 XX
 CC The present invention relates to the isolation of human transcriptional
 CC activation subunit 14, and the polynucleotide encoding it. Also described
 CC is the process for preparing the protein by DNA recombination and the
 CC application of the polypeptide and polynucleotide in treating various
 CC diseases such as malignant neoplasms, haematopathy, human
 CC immunodeficiency virus (HIV) infection, immunological diseases, and

CC various inflammations. Antagonists against the polypeptide can also be
 CC used in treating such diseases. The present sequence for reverse
 CC transcriptase (RT)-PCR primer #2 is used with RT-PCR primer #1 (ABK13714)
 CC for isolating cDNA encoding human transcriptional activation subunit 14
 XX
 SQ Sequence 24 BP; 0 A; 2 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAAAGAAAAA 2730
 | | | | | | | | | | | | | | | | | | | |
 Db 24 CCAAAAAAAGAAAAAAGAAAAAAGAA 1

RESULT 742
 ACD99368/c
 ID ACD99368 standard; DNA; 24 BP.
 XX
 AC ACD99368;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #54.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.

XX US2003050268-A1.
 XX 13-MAR-2003.
 XX 29-MAR-2002; 2002US-00112653.
 XX 29-MAR-2001; 2001US-0279642P.
 PR (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 10; 229pp; English.

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAAAGAAAAAAGAA 2732
 | | | | | | | | | | | | | | | | | | | |
 Db 24 AAAAACAACAAAAAAGAAAAAAGAA 1

RESULT 743
 ADB36437/c
 ID ADB36437 standard; DNA; 24 BP.
 XX
 AC ADB36437;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #51.
 XX
 KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX
 OS Synthetic.

XX US2003087848-A1.
 XX 08-MAY-2003.
 XX 02-FEB-2001; 2001US-00776479.
 XX 03-FEB-2000; 2000US-0179991P.
 PR (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 XX
 DR WPI; 2003-657977/62.
 XX
 PT Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 XX
 PS Disclosure; Page 6; 221pp; English.

CC The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX

SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAAAGAAAAAAGAA 2732
 | | | | | | | | | | | | | | | | | | | |
 Db 24 AAAAACAACAAAAAAGAAAAAAGAA 1

RESULT 744
 ADG75925/c
 ID ADG75925 standard; DNA; 24 BP.
 XX
 AC ADG75925;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Immunostimulatory non-CpG oligonucleotide IMT 180 SeqID 27.
 XX
 KW ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.
 XX
 OS Synthetic.

```

PN WO2003101375-A2.
XX
XX
PD 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
XX Claim 14; SEQ ID NO 27; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAACAAATGAAAAAAAAAAAAAAAAA 1

RESULT 745
ADG75926/c
ID ADG75926 standard; DNA; 24 BP.
XX
XX ADG75926;
XX
XX 11-MAR-2004 (first entry)
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 181 SeqID 28.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX

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XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating, e.g.
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
XX Claim 14; SEQ ID NO 28; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAAAAAA 2729
Db 24 ACAAAATGAAAAAAAAAAAAAAAAA 1

RESULT 746
ADG75922/c
ID ADG75922 standard; DNA; 24 BP.
XX
XX ADG75922;
XX
XX 11-MAR-2004 (first entry)
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 177 SeqID 24.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX

```


CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
 CC invention.

XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAACAAAAAACAA 1

RESULT 749

ADG76035/c
 ID ADG76035 standard; DNA; 24 BP.

XX
 AC ADG76035;

XX
 DT 11-MAR-2004 (first entry)

XX
 DE Non-CpG DNA oligonucleotide 36.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX
 OS Synthetic.

XX
 PN WO2003101375-A2.

XX
 PD 11-DEC-2003.

XX
 PF 30-MAY-2003; 2003WO-EP005691.

XX
 PR 30-MAY-2002; 2002CA-02388049.

XX
 PA (IMMU-) IMMUNOTECH SA.

XX
 PI Lopez RA;

XX
 PS WPI; 2004-053333/05.

XX
 CC New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX
 PS Example 17; Page 81; 139pp; English.

XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the

CC invention.

XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAACAAAAAACAA 1

RESULT 750

ADG75919/c
 ID ADG75919 standard; DNA; 24 BP.

XX
 AC ADG75919;

XX
 DT 11-MAR-2004 (first entry)

XX
 DE Immunostimulatory non-CpG oligonucleotide IMT 174 SeqID 21.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX
 OS Synthetic.

XX
 PN WO2003101375-A2.

XX
 PD 11-DEC-2003.

XX
 PF 30-MAY-2003; 2003WO-EP005691.

XX
 PR 30-MAY-2002; 2002CA-02388049.

XX
 PA (IMMU-) IMMUNOTECH SA.

XX
 PI Lopez RA;

XX
 PS WPI; 2004-053333/05.

XX
 CC New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX
 PS Claim 14; SEQ ID NO 21; 139pp; English.

XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 CC variant DNA oligo, used in an exemplification of the invention.

XX
 SQ Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy	2709	AAAAAAAAAAAAAAAAAAAAAAAAAAAAA	2732
Db	24	AAAAAAAAAAAAAAAAACAAATGAA	1
RESULT 751			
ID	ADG75971/c		
XX	ADG75971 standard; DNA; 24 BP.		
XX	ADG75971;		
XX	AC		
XX	XX		
XX	11-MAR-2004 (first entry)		
XX	XX		
DE	Immunostimulatory non-CpG phosphorothioate DNA oligo IMT179 SeqID73.		
XX	ss; non-CpG; immunostimulatory; non-palindromic; immune response;		
KW	proliferation; differentiation; cytokine; antibody production; B-cell;		
KW	plasmacytoid dendritic cell; immunomodulator; gene therapy;		
KW	chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;		
KW	renal cell carcinoma.		
XX	XX		
OS	Synthetic.		
XX	WO2003101375-A2.		
PN	11-DEC-2003.		
XX	XX		
XX	30-MAY-2003; 2003WO-EP005691.		
XX	30-MAY-2002; 2002CA-02388049.		
PD	11-DEC-2003.		
XX	30-MAY-2003; 2003WO-EP005691.		
XX	30-MAY-2002; 2002CA-02388049.		
XX	(IMMU-) IMMUNOTECH SA.		
PA	Lopez RA;		
XX	XX		
PI	WPI; 2004-053333/05.		
XX	XX		
DR	New immunostimulatory oligonucleotide comprising non-palindromic nucleic		
PT	acid sequence motif, useful for inducing B-cell activation, treating,		
PT	preventing or ameliorating immune system disorder or tumoral disease e.g.		
PT	melanoma.		
XX	XX		
XX	Example 5; SEQ ID NO 73; 139pp; English.		
XX	XX		
CC	This invention relates to novel immunostimulatory oligonucleotides that		
CC	contain a non-palindromic sequence motif. Specifically, it refers to DNA		
CC	oligonucleotides (without a CpG motif), which can stimulate an immune		
CC	response in animals of the order of primate, including humans. The immune		
CC	response is characterised by the proliferation, differentiation, cytokine		
CC	and antibody production in B-cells, as well as cell differentiation and		
CC	cytokine production in plasmacytoid dendritic cells. The present		
CC	invention describes immunomodulator compositions that also comprise an		
CC	antigen selected from, for example, viruses, bacteria, parasites, tumour		
CC	cells and glycolipids. As such, these DNA oligos can be used in gene		
CC	therapy for inducing B-cell activation, treating, preventing or		
CC	ameliorating an immune system disorder or a tumoral disease including		
CC	chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell		
CC	carcinoma. This oligonucleotide sequence is an immunostimulatory		
CC	phosphorothioate non-CpG variant DNA oligo, used to determine the effect		
CC	of oligo size on B cell proliferation and IL6 secretion in an		
CC	exemplification of the invention.		
XX	XX		
SQ	Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;		
Query Match 0.7%; Score 19.2; DB 1; Length 24;			
Best Local Similarity 87.5%; Pred. No. 8.4e+02;			
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;			
Qy	2709	AAAAAAAAAAAAAAAAAAAAAAAAAAAAA	2732
Db	24	AAAAAAAAAATGAA	1
RESULT 753			
ID	ADG75923/c		
XX	ADG75923 standard; DNA; 24 BP.		
XX	ADG75923;		
XX	XX		

```

DT 11-MAR-2004 (first entry)
DE Immunostimulatory non-CpG oligonucleotide IMT 178 SeqID 25.
XX
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX Synthetic.
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 25; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primates, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoural disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
CC variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 754
ADG75921/c
ID ADG75921 standard; DNA; 24 BP.
XX
XX ADG75921;
XX
XX 11-MAR-2004 (first entry)
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 176 SeqID 23.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW

DT 11-MAR-2004 (first entry)
DE Immunostimulatory non-CpG oligonucleotide IMT 178 SeqID 25.
XX
XX
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW renal cell carcinoma.
XX
XX Synthetic.
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 25; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primates, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoural disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
CC variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 755
AD081076
ID AD081076 standard; DNA; 24 BP.
XX
XX AD081076;
XX
XX 29-JUL-2004 (first entry)
XX
XX Cow prion protein microsatellite locus primer #88.
XX
XX gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW microsatellite; PCR; primer; ss.
XX
XX Bos taurus.
XX
XX DE10236711-A1.
XX

```

KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX Synthetic.

XX WO2003101375-A2.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-EP005691.

XX 30-MAY-2002; 2002CA-02388049.

XX (IMMU-) IMMUNOTECH SA.

XX Lopez RA;

XX WPI; 2004-053333/05.

XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 acid sequence motif, useful for inducing B-cell activation, treating, e.g.
 preventing or ameliorating immune system disorder or tumoral disease e.g.
 melanoma.

XX Claim 14; SEQ ID NO 23; 139pp; English.

XX This invention relates to novel immunostimulatory oligonucleotides that
 contain a non-palindromic sequence motif. Specifically, it refers to DNA
 oligonucleotides (without a CpG motif), which can stimulate an immune
 response in animals of the order of primates, including humans. The immune
 response is characterised by the proliferation, differentiation, cytokine
 and antibody production in B-cells, as well as cell differentiation and
 cytokine production in plasmacytoid dendritic cells. The present
 invention describes immunomodulator compositions that also comprise an
 antigen selected from, for example, viruses, bacteria, parasites, tumour
 cells and glycolipids. As such, these DNA oligos can be used in gene
 therapy for inducing B-cell activation, treating, preventing or
 ameliorating an immune system disorder or a tumoural disease including
 chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;

Best Local Similarity 87.5%; Pred. No. 8.4e+02;

Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 755

AD081076

ID AD081076 standard; DNA; 24 BP.

XX AD081076;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #88.

XX gene typing; polymorphic microsatellite loci; PML;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX

PD 26-FEB-2004.
 XX
 PF 09-AUG-2002; 2002DE-01036711.
 XX
 PR 09-AUG-2002; 2002DE-01036711.
 XX
 XX (UYHO-) UNIV HOHENHEIM.
 XX
 PI Geldermann H, Preuss S, Han Y;
 XX
 DR WPI; 2004-215730/21.
 XX
 XX Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.
 XX
 PS Example 3; Page 29; 64pp; German.
 XX
 XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.
 XX
 SQ Sequence 24 BP; 21 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 1 AAAAAAAAAACAAACAAACAAACA 24
 RESULT 756
 AD081066/C
 ID AD081066 standard; DNA; 24 BP.
 XX
 AC AD081066;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX Cow prion protein microsatellite locus primer #78.
 DE
 XX gene typing; polymorphic microsatellite loci; PML;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pr7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.
 XX
 OS Bos taurus.
 XX
 XX DE10236711-A1.
 PN
 XX 26-FEB-2004.
 PD
 XX 09-AUG-2002; 2002DE-01036711.
 PF
 XX 09-AUG-2002; 2002DE-01036711.
 PR
 XX

PA (UYHO-) UNIV HOHENHEIM.
 XX
 PI Geldermann H, Preuss S, Han Y;
 XX
 DR WPI; 2004-215730/21.
 XX
 XX Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.
 XX
 PS Example 3; Page 28; 64pp; German.
 XX
 XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.
 XX
 SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAGAAAGAAAGAAAAA 1
 RESULT 757
 ADU89376/C
 ID ADU89376 standard; DNA; 24 BP.
 XX
 AC ADU89376;
 XX
 XX 10-FEB-2005 (first entry)
 DT
 XX Allergic response suppressor oligonucleotide #60.
 DE
 XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX
 OS Synthetic.
 XX
 XX US2004235774-A1.
 PN
 XX 25-NOV-2004.
 PD
 XX 23-APR-2004; 2004US-00831778.
 PF
 XX 03-FEB-2000; 2000US-0179991P.
 PR
 XX 02-FEB-2001; 2001US-00776479.
 XX
 XX (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 XX

DR WPI; 2004-833006/82.
 XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.
 XX
 XX Disclosure; SEQ ID NO 60; 235pp; English.
 XX
 CC The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an
 CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other
 CC medications. They can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.
 XX
 XX Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 750
 AED74921/C
 ID AED74921 standard; DNA; 24 BP.
 XX
 AC AED74921;
 XX
 DT 12-JAN-2006 (first entry)
 XX
 DE Immunostimulatory oligonucleotide, SEQ ID 54.
 XX
 KW Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
 KW Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
 KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
 KW Crohn's disease; ulcerative colitis; eczema; skin allergy;
 KW contact dermatitis; ss; phosphorothioate.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..24
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 PN US2005250726-A1.
 XX
 XX 10-NOV-2005.
 XX
 XX 12-MAY-2005; 2005US-00127654.
 PF
 XX 29-MAR-2001; 2001US-0279642P.
 PR
 XX 29-MAR-2002; 2002US-00112653.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX
 PI Krieg AM, Berg DJ;
 XX
 XX WPI; 2005-768014/78.
 DR
 XX
 XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 54; 58pp; English.
 XX
 CC The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.
 XX
 XX Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 759
 AAQ75551/C
 ID AAQ75551 standard; DNA; 19 BP.
 XX
 AC AAQ75551;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; CDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 XX Disclosure; Page 5; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAA 2725
 DB 24 CTAATAAAAAAAAAAAAAA 1


```

FT modified_base 16..18
FT /tag= a
FT /note= "these T residues are formed as part of a
FT conventional phosphoramidite oligonucleotide synthesis
FT process but using as the reactant a thymosine nucleoside
FT having at the 3'-position a group of formula -CH2-
FT P(OCH2CH2CN)-N(iPr)2"
XX
XX WO9747636-A2.
XX
XX 18-DEC-1997.
XX
XX 03-JUN-1997; 97WO-GB001490.
XX
XX 13-JUN-1996; 96GB-00012600.
XX (NOVS ) NOVARTIS AG.
XX
XX Collingwood SP, Moser HE, Altmann K, Douglas ME;
XX WPI; 1998-052233/05.
XX
XX New tetra:hydro:furan derivatives - useful in the synthesis of
XX oligo:nucleotide(s).
XX
XX Example 12; Page 29; 37pp; English.
XX
XX The invention relates, inter alia, to a method of preparing an
XX oligonucleotide by coupling (1) a new nucleoside having a protected 5'-
XX hydroxy group and at the 3'-position a group of formula -CH2-P(OR3)-
XX NR4R5, with (2) a nucleoside or oligonucleotide having a free 5'-hydroxy
XX group, to give (3) a precursor having an internucleoside linkage of
XX formula -CH2-P(OR3)-O-; and converting this to a linkage of formula -CH2-
XX P(OR3)(-X)-O- (where X = S or O). The present sequence is a specific
XX example of an oligonucleotide so prepared
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1
RESULT 763
AAX81316/c
ID AAX81316 standard; DNA; 19 BP.
XX
XX AAX81316;
XX
XX 20-AUG-1999 (first entry)
XX
XX 5' amino oligonucleotide probe T-2.
XX
XX Microelectronic device; multi-step reaction; microscopic format;
XX ion-permeable permeation layer; electrode; electrical control; transport;
XX attachment; binding; DNA/RNA hybrid; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1 /tag= a
XX /note= "amino group attached at 5' terminal"
XX
XX WO929711-A1.
XX
XX 17-JUN-1999.
XX
XX 01-DEC-1998; 98WO-US025475.

```

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XX 05-DEC-1997; 97US-00986065.
XX (NANO-) NANOGEN INC.
XX Sosnowski RG, Butler WF, Tu E, Nerenberg MI, Heller MJ, Edman CF;
XX WPI; 1999-385567/32.
XX
XX New microelectronic device designed to carry out and control multi-step
XX and multiplex molecular biological reactions in microscopic format.
XX
XX Example 1; Page 90; 179pp; English.
XX
XX The specification describes a self-addressable, self-assembling
XX microelectronic device which is designed to actively carry out and
XX control multi-step and multiplex molecular biological reactions in
XX microscopic formats. A key aspect of this invention is played by the ion
XX permeable permeation layer which overlies the electrode. This permeation
XX layer allows attachment of nucleic acids to permit immobilization but
XX also separates the attached oligonucleotides and hybridized target DNA
XX sequences from the highly reactive electrochemical environment generated
XX immediately at the electrode surface. The microelectronic device is
XX designed and fabricated to actively carry out and control reactions such
XX as nucleic acid hybridizations, antibody/antigen reactions, sample
XX preparation, diagnostics and biopolymer synthesis. The device can
XX electronically control the transport and attachment of specific binding
XX entities, such as nucleic acids and polypeptides, to specific micro-
XX locations. The device can subsequently control the transport and reaction
XX of analytes or reactants at the addressed specific micro-locations. The
XX device is able to concentrate analytes and reactants, remove non-
XX specifically bound molecules, provide stringency control for DNA
XX hybridization reactions and improve the detection of analytes. The
XX present sequence represents a probe used to exemplify the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1
RESULT 764
AAX81927/c
ID AAX81927 standard; DNA; 19 BP.
XX
XX AAX81927;
XX
XX 07-SEP-1999 (first entry)
XX
XX Polynucleotide strand with amino groups.
XX
XX Enzyme-specific cleavable polynucleotide substrate;
XX quenched fluorescent moiety; biological assay; detection; identification;
XX microorganism; sterilization assurance; nuclease; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 7 /tag= a
XX /note= "amine-modified C6 derivative of deoxythymidine
XX (dT)"
XX
XX modified_base 9 /tag= b
XX /note= "amine-modified C6 derivative of deoxythymidine
XX (dT)"
XX
XX modified_base 11 /tag= c

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FT      /note= "amine-modified C6 derivative of deoxythymidine
FT      (dT)"
FT      modified_base 13
FT      /*tag= d
FT      /note= "amine-modified C6 derivative of deoxythymidine
FT      (dT)"
XX
FN      WO9935288-A1.
XX
XX      15-JUL-1999.
XX
XX      20-AUG-1998; 98WO-US017311.
XX
XX      09-JAN-1998; 98US-00005260.
XX
XX      (MINN ) MINNESOTA MINING & MFG CO.
XX
XX      Wei A, Mach PA;
XX
XX      WPI; 1999-419356/35.
XX
XX      An enzyme-specific cleavable polynucleotide substrate bearing quenched
XX      fluorescent moieties.
XX
XX      Example 2; Page 20; 34pp; English.
XX
XX      The specification describes an enzyme-specific cleavable polynucleotide
XX      substrate bearing quenched fluorescent moieties. The enzyme-specific
XX      cleavable polynucleotide substrate is useful in biological assays for
XX      detection and identification of microorganisms, sterilization assurance,
XX      pharmaceutical discovery, enzyme assays, immunoassays and other
XX      biological assays. The method provides a rapid and convenient approach
XX      for detection and identification of microorganisms. It can be adapted to
XX      sequence-dependent or sequence-independent tests. The invention provides
XX      improved accuracy, faster detection, and overall lower cost in detection
XX      and identification of microorganisms. The presence of nuclease is
XX      measured more accurately and sensitively by red-shifting the emission
XX      wavelength from far UV region (350-400 nm) to the 500-600 nm region of
XX      the electromagnetic spectrum and reducing the effect of background signal
XX      levels of intact reagents. The present sequence is used in the course of
XX      the invention
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match 0.7%; Score 19; DB 1; Length 19;
XX      Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX      Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAA 2727
Db      19 AAAAAAAAAAAAAAAAAA 1

RESULT 765
AAZ01358/c
ID      AAZ01358 standard; DNA; 19 BP.
XX
XX      AAZ01358;
XX
XX      27-SEP-1999 (first entry)
XX
XX      PCR primer for PGI biallelic marker 4-4-187.
XX
XX      PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX      cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX      PSA; human; ss.
XX
XX      Synthetic.
XX      Homo sapiens.
XX
XX      WO9932644-A2.
XX
XX      01-JUL-1999.
XX
XX      PN

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XX      22-DEC-1998; 98WO-IB002133.
XX
XX      22-DEC-1997; 97US-00996306.
XX
XX      09-SEP-1998; 98US-0099658P.
XX
XX      (GBST ) GENSET.
XX
XX      Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX
XX      WPI; 1999-405178/34.
XX
XX      Use of a prostate cancer associated gene and biallelic markers derived
XX      from it.
XX
XX      Claim 4; Page 374; 385pp; English.
XX
XX      The invention relates to a mammalian PGI gene and protein, and a set of
XX      PGI biallelic markers. The PGI polynucleotide and biallelic markers are
XX      used in a hybridisation assay, a sequencing assay, or in an allele-
XX      specific amplification assay for determining the identity of a nucleotide
XX      at a PGI-related biallelic marker. The methods can be used to detect and
XX      to assess the risk of developing cancer or prostate cancer. Early-stage
XX      diagnosis of prostate cancer relies on prostate specific antigen (PSA)
XX      dosage. However, the effectiveness of this is limited due to its
XX      inability to discriminate between malignant and non-malignant affections
XX      of the organ. A need exists for both a reliable diagnostic procedure
XX      which would enable early-stage diagnosis, and for preventative and
XX      curative treatments of the disease. The PGI gene can be used for
XX      detection of prostate cancer, and the risk of developing it in the
XX      future, and can also be used to determine therapies for the disease
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match 0.7%; Score 19; DB 1; Length 19;
XX      Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX      Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAA 2727
Db      19 AAAAAAAAAAAAAAAAAA 1

RESULT 766
AAZ61390/c
ID      AAZ61390 standard; DNA; 19 BP.
XX
XX      AAZ61390;
XX
XX      19-JUN-2000 (first entry)
XX
XX      Uniform phosphodiester oligonucleotide.
XX
XX      Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
XX      nuclease resistance; phosphodiester; ss.
XX
XX      Synthetic.
XX
XX      Key Location/Qualifiers
XX      modified_base 16 /*tag= a
XX      /*note= "2'-modified T"
XX      modified_base 17 /*tag= b
XX      /*note= "2'-modified T"
XX      modified_base 18 /*tag= c
XX      /*note= "2'-modified T"
XX      modified_base 19 /*tag= d
XX      /*note= "2'-modified T"
XX
XX      WO200008044-A1.
XX
XX      PN

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XX PD 17-FEB-2000.
XX PF 06-AUG-1999; 99WO-US017895.
XX PR 07-AUG-1998; 98US-00130566.
XX PS (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD;
XX PT WPI; 2000-205668/18.
XX SQ Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides
used in diagnostic, therapeutic and research reagents.
XX PS Disclosure; Page 44; 60pp; English.
XX CC The present sequence represents an uniform phosphodiester
CC oligonucleotide. The specification describes oligomeric compounds
CC containing 2'-O-modified ribosyl nucleosides. The 2'-O-modified
CC nucleosides include ring structures that position the sugar moiety of the
CC nucleosides preferentially in 3' endo geometries. The modified oligomeric
CC compounds have increased binding affinity and increased nuclease
CC resistance. The oligomeric compounds can be used in diagnostic,
CC therapeutic and research reagents
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 767
AAZ61404/c
ID AAZ61404 standard; DNA; 19 BP.
AC AAZ61404;
XX 19-JUN-2000 (first entry)
XX 2'-O-modified ribosyl oligonucleotide with phosphodiester linkages.
XX Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
XX nuclease resistance; phosphorothioate; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT misc_feature 1..19
FT /tag= a
FT /note= "nucleosides linked by phosphodiester linkages"
FT modified_base 16..19
FT /tag= b
FT /note= "2'-O-[2-N,N-dimethylaminoethyl]oxyethyl-5- methyl
FT uridine"
XX WO200008044-A1.
XX 17-FEB-2000.
XX 06-AUG-1999; 99WO-US017895.
XX 07-AUG-1998; 98US-00130566.
XX (ISIS-) ISIS PHARM INC.
XX Manoharan M, Cook PD;
XX PI

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XX WPI; 2000-205668/18.
XX Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides
XX used in diagnostic, therapeutic and research reagents.
XX PS Disclosure; Page 51; 60pp; English.
XX CC The present sequence represents an oligomeric compound containing 2'-O-
XX modified ribosyl nucleosides. The oligomeric compound contains
XX phosphodiester linkages. The 2'-O-modified nucleosides include ring
XX structures that position the sugar moiety of the nucleosides
XX preferentially in 3' endo geometries. The modified oligomeric compounds
XX have increased binding affinity and increased nuclease resistance. The
XX oligomeric compounds can be used in diagnostic, therapeutic and research
XX reagents
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 768
AAC62422/c
ID AAC62422 standard; DNA; 19 BP.
XX AAC62422;
XX 07-FEB-2001 (first entry)
XX T19 diester for use in nuclease stability assay.
XX T19 diester; nuclease stability assay; polymerase chain reaction; PCR;
XX molecular cloning; disease diagnosis; disease treatment; ss.
XX Synthetic.
XX US6127124-A.
XX 03-OCT-2000.
XX 20-JAN-1999; 99US-00234237.
XX 20-JAN-1999; 99US-00234237.
XX (ISIS-) ISIS PHARM INC.
XX Leeds JM, Cummins LL;
XX WPI; 2000-637737/61.
XX Determining the nuclease stability and relative binding affinity of an
XX oligomeric compound comprises capillary gel electrophoresis using laser-
XX induced fluorescence.
XX Example 3; Col 19-20; 14pp; English.
XX The present invention is concerned with methods of determining the
XX nuclease stability of oligomeric compounds using capillary-gel
XX electrophoresis and laser-induced fluorescence. The methods are useful in
XX the polymerase chain reaction (PCR), molecular cloning and disease
XX diagnosis and treatment. The present sequence was used in a demonstration
XX of the methods of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;

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Best Local Similarity 100.0%; Pred. No. 7.7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 769
AAZ95241/c
ID AAZ95241 standard; DNA; 19 BP.
XX
AC AAZ95241;
XX
DT 05-JUN-2000 (first entry)
XX
DE Modified oligonucleotide #3 ISIS # 22111.
XX
KW Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22111;
KW research reagent; therapeutic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /*tag= a
FT /note= "Phosphorothioate internucleotide linkage"
FT misc_feature 15..19
FT /*tag= d
FT /note= "Optionally all phosphorothioate internucleotide
FT modified_base 16..19
FT linkages"
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-
FT misc_RNA 19
FT /*tag= d
XX
PN WO200004189-A1.
XX
PD 27-JAN-2000.
XX
PF 13-JUL-1999; 99WO-US015886.
XX
PR 14-JUL-1998; 98US-00115043.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
DR WPI; 2000-182445/16.
XX
PS Example 54; Page 59; 75pp; English.
XX
CC This sequence represents a modified oligonucleotide used in the course of
CC the invention. The invention relates to oligonucleotides comprising
CC nucleotides covalently linked together by internucleotide linkages where
CC at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
CC can be used in gene therapy and are also useful in antisense
CC methodologies, diagnostics, therapeutics and as research reagents
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

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Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 770
AAZ95240/c
ID AAZ95240 standard; DNA; 19 BP.
XX
AC AAZ95240;
XX
DT 05-JUN-2000 (first entry)
XX
DE Modified oligonucleotide #3 ISIS # 22110.
XX
KW Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22110;
KW research reagent; therapeutic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /*tag= a
FT /note= "Phosphorothioate internucleotide linkage"
FT misc_feature 15..19
FT /*tag= d
FT /note= "Optionally all phosphorothioate internucleotide
FT modified_base 16..19
FT linkages"
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-
FT WO200004189-A1.
XX
PN 27-JAN-2000.
XX
PD 13-JUL-1999; 99WO-US015886.
XX
PR 14-JUL-1998; 98US-00115043.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
DR WPI; 2000-182445/16.
XX
PS Novel modified oligonucleotides, useful in antisense methodologies,
PT diagnostics, therapeutics and as research reagents.
XX
PS Example 54; Page 59; 75pp; English.
XX
CC This sequence represents a modified oligonucleotide used in the course of
CC the invention. The invention relates to oligonucleotides comprising
CC nucleotides covalently linked together by internucleotide linkages where
CC at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
CC can be used in gene therapy and are also useful in antisense
CC methodologies, diagnostics, therapeutics and as research reagents
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 771
AAA06839/c

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ID AAA06839 standard; DNA; 19 BP.
XX
AC AAA06839;
XX
DT 19-JUN-2000 (first entry)
XX
DE Modified T-containing oligonucleotide, SEQ ID NO:14.
XX
KW Modified nucleoside; aminoxy group;
XX 2'-deoxy-erythro-pentofuranosyl sugar moiety; nuclease resistant;
KW hybridisation; binding affinity; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /tag= a
FT /note= "These nucleotides are substituted with 2'-O-{2-
FT [N-(2-amino)ethyl-N-(methyl)]aminoxyethyl} group"
XX
PN WO200008042-A1.
XX
XX 17-FEB-2000.
XX
XX 09-AUG-1999; 99WO-US017988.
XX
XX 07-AUG-1998; 98US-00130973.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Kawasaki AM;
XX
XX WPI; 2000-224020/19.
XX
XX Aminoxy-modified nucleosides and oligonucleotides useful in diagnostic,
XX therapeutic and research reagents and for modulating the expression of
XX protein in organisms.
XX
XX Example 99; Page 120; 195pp; English.
XX
XX The invention relates to aminoxy-modified nucleosides and
XX oligonucleotides and to oligonucleotides that elicit RNase H for cleavage
XX in a complementary nucleic acid strand. It also relates to
XX oligonucleotides wherein at least some of the nucleotides are
XX functionalised to be nuclease resistant, at least some of the nucleotides
XX include a substituent that potentiates hybridisation of the
XX oligonucleotide to a complementary strand, and at least some of the
XX nucleotides include a 2'-deoxy-erythro-pentofuranosyl sugar moiety. The
XX inclusion of one or more aminoxy moieties in such oligonucleotides
XX provides for improved binding of such oligonucleotides to a complementary
XX strand. The oligonucleotides of the invention are used as diagnostic,
XX therapeutic or research reagents, and can be used to modulate gene
XX expression in organisms. The oligonucleotides containing the modified
XX nucleosides have increased nuclease resistance and increased binding
XX affinity to a complementary strand. The present sequence represents an
XX oligonucleotide containing nucleotides substituted with a 2'-O-{2- [N-(2-
XX amino)ethyl-N-(methyl)]aminoxyethyl} group
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 772
AAA88952/c
ID AAA88952 standard; DNA; 19 BP.
XX

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AC AAA88952;
XX
DT 05-MAR-2001 (first entry)
XX
DE Oligonucleotide ISIS 22115.
XX
KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
KW diagnosis; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..15
FT /tag= f
FT /note= "phosphorothioate linkage"
FT modified_base 16
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT modified_base 17
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT modified_base 18
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT misc_RNA 19
FT /tag= e
FT /label= RNA
FT modified_base 19
FT /tag= d
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)uridine"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22115 contains a mixed phosphodiester and
XX phosphorothioate backbone and has 2'-O-(2-methoxyethyl) chemistry. It was
XX used in experiments to determine the effects of snake venom
XX phosphodiesterase and liver homogenate on the stability of
XX oligonucleotides. Novel oligonucleotides of the invention have both A-
XX and B-form conformational geometry. The A-form geometry modulates the
XX binding affinity and nuclease resistance of the oligonucleotide. The B-
XX form geometry allows the oligonucleotide to serve as substrate for RNase-
XX H when bound to a target nucleic acid strand. The oligonucleotides can be
XX used to treat psoriasis and other inflammatory skin conditions, skin
XX cancers and viral, bacterial and fungal infections, and in various
XX diagnostic applications
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;

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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 773
ID AAA88965/c
AC AAA88965;
XX
XX
XX 05-MAR-2001 (first entry)
XX
XX 2'-Modified chimeric oligonucleotide.
XX
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
XX (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX modified_base 17
XX /*tag= b
XX /mod_base= OTHER
XX /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
XX (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX modified_base 18
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
XX (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX modified_base 19
XX /*tag= d
XX /mod_base= OTHER
XX /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
XX (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 86; Page 102; 132pp; English.
XX
XX This sequence represents 2'-modified chimeric oligonucleotides containing
XX 2'-modified T. The nucleotides were used to examine the effects of the
XX modifications on nuclease resistance. Novel oligonucleotides of the
XX invention have both A- and B-form conformational geometry. The A-form
XX geometry modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory

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CC skin conditions, skin cancers and viral, bacterial and fungal infections,
CC and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 774
ID AAA88949/c
XX AAA88949 standard; DNA; 19 BP.
XX
XX AAA88949;
XX
XX 05-MAR-2001 (first entry)
XX
XX Oligonucleotide ISIS 22112.
XX
XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX diagnosis; ss.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16
XX /*tag= e
XX /note= "phosphorothioate linkage"
XX modified_base 17
XX /*tag= a
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX modified_base 18
XX /*tag= b
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX modified_base 19
XX /*tag= c
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX modified_base 20
XX /*tag= d
XX /mod_base= OTHER
XX /note= "3'-O-(2-methoxyethyl)thymidine"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22112 contains a phosphorothioate backbone and has
XX 3'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine

```

CC the effects of snake venom phosphodiesterase and liver homogenate on the
 CC stability of oligonucleotides. Novel oligonucleotides of the invention
 CC have both A- and B-form conformational geometry. The A-form geometry
 CC modulates the binding affinity and nuclease resistance of the
 CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
 CC as substrate for RNase-H when bound to a target nucleic acid strand. The
 CC oligonucleotides can be used to treat psoriasis and other inflammatory
 CC skin conditions, skin cancers and viral, bacterial and fungal infections,
 CC and in various diagnostic applications
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 775
 AAA88950/c
 ID AAA88950 standard; DNA; 19 BP.
 XX
 AC AAA88950;
 DT 05-MAR-2001 (first entry)
 XX
 DE Oligonucleotide ISIS 22113.
 XX
 KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
 KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
 KW diagnosis; DNA-RNA hybrid; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1. .19
 FT /*tag= f
 FT /note= "phosphorothioate linkage"
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT misc_RNA 19
 FT /*tag= e
 FT /label= RNA
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)uridine"
 FT
 XX WO200066609-A1.
 PN 09-NOV-2000.
 XX
 PD 03-MAY-2000; 2000WO-US011913.
 XX
 PF 03-MAY-1999; 99US-00303586.
 XX
 PR (ISIS-) ISIS PHARM INC.
 XX
 PA Manoharan M, Mohan V;
 XX
 PI 03-MAY-2000; 2000WO-US011913.
 XX

DR WPI; 2000-672833/65.
 XX New oligonucleotides containing sequences with A and B geometry, used to
 PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
 PT bacterial infections, bind to single stranded RNA or DNA.
 XX Example 54; Page 69; 132pp; English.
 PS
 XX Oligonucleotide ISIS 22113 contains a phosphorothioate backbone and has
 CC 2'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine
 CC the effects of snake venom phosphodiesterase and liver homogenate on the
 CC stability of oligonucleotides. Novel oligonucleotides of the invention
 CC have both A- and B-form conformational geometry. The A-form geometry
 CC modulates the binding affinity and nuclease resistance of the
 CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
 CC as substrate for RNase-H when bound to a target nucleic acid strand. The
 CC oligonucleotides can be used to treat psoriasis and other inflammatory
 CC skin conditions, skin cancers and viral, bacterial and fungal infections,
 CC and in various diagnostic applications
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 776
 AAA88951/c
 ID AAA88951 standard; DNA; 19 BP.
 XX
 AC AAA88951;
 DT 05-MAR-2001 (first entry)
 XX
 DE Oligonucleotide ISIS 22114.
 XX
 KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
 KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
 KW diagnosis; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1. .15
 FT /*tag= e
 FT /note= "phosphorothioate linkage"
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT
 XX WO200066609-A1.
 PN 09-NOV-2000.
 XX
 PD 03-MAY-2000; 2000WO-US011913.
 XX


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XX PR 03-MAY-1999; 99US-00303586.
XX PD
XX PF (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Mohan V;
XX PR WPI; 2000-672833/65.
XX PS
XX PT New oligonucleotides containing sequences with A and B geometry, used to
XX PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX PT bacterial infections, bind to single stranded RNA or DNA.
XX PS Example 54; Page 69; 132pp; English.
XX CC Oligonucleotide ISIS 22114 contains a mixed phosphodiester and
XX CC phosphorothioate backbone and has 3'-O-(2-methoxyethyl) chemistry. It was
XX CC used in experiments to determine the effects of snake venom
XX CC phosphodiesterase and liver homogenate on the stability of
XX CC oligonucleotides. Novel oligonucleotides of the invention have both A-
XX CC and B-form conformational geometry. The A-form geometry modulates the
XX CC binding affinity and nuclease resistance of the oligonucleotide. The B-
XX CC form geometry allows the oligonucleotide to serve as substrate for RNase-
XX CC H when bound to a target nucleic acid strand. The oligonucleotides can be
XX CC used to treat psoriasis and other inflammatory skin conditions, skin
XX CC cancers and viral, bacterial and fungal infections, and in various
XX CC diagnostic applications
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 777
AAA88947/c
ID AAA88947 standard; DNA; 19 BP.
XX AC AAA88947;
XX DT 05-MAR-2001 (first entry)
XX DE Oligonucleotide ISIS 22110.
XX KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX KW diagnosis; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 16 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX FT modified_base 17 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX FT modified_base 18 /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX FT modified_base 19 /*tag= d
XX FT /mod_base= OTHER
XX FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX FT

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PN WO200066609-A1.
XX PD 09-NOV-2000.
XX PF 03-MAY-2000; 2000WO-US011913.
XX PR 03-MAY-1999; 99US-00303586.
XX PS (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Mohan V;
XX PR WPI; 2000-672833/65.
XX PS
XX PT New oligonucleotides containing sequences with A and B geometry, used to
XX PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX PT bacterial infections, bind to single stranded RNA or DNA.
XX PS Example 54; Page 69; 132pp; English.
XX CC Oligonucleotide ISIS 22110 contains a phosphodiester backbone and has 3'-
XX CC O-(2-methoxyethyl) chemistry. It was used in experiments to determine the
XX CC effects of snake venom phosphodiesterase and liver homogenate on the
XX CC stability of oligonucleotides. Novel oligonucleotides of the invention
XX CC have both A- and B-form conformational geometry. The A-form geometry
XX CC modulates the binding affinity and nuclease resistance of the
XX CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX CC as substrate for RNase-H when bound to a target nucleic acid strand. The
XX CC oligonucleotides can be used to treat psoriasis and other inflammatory
XX CC skin conditions, skin cancers and viral, bacterial and fungal infections,
XX CC and in various diagnostic applications
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 778
AAA88948/c
ID AAA88948 standard; DNA; 19 BP.
XX AC AAA88948;
XX DT 05-MAR-2001 (first entry)
XX DE Oligonucleotide ISIS 22111.
XX KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
XX KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
XX KW diagnosis; DNA-RNA hybrid; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 16 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-(2-methoxyethyl)thymidine"
XX FT modified_base 17 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-O-(2-methoxyethyl)thymidine"
XX FT modified_base 18 /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-(2-methoxyethyl)thymidine"
XX FT misc_RNA 19

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```

FT FT /*tag= e
FT FT /label= RNA
FT FT 19
FT FT /tag= d
FT FT /mod_base= OTHER
FT FT /note= "2'-O-(2-methoxyethyl)uridine"
XX WO200066609-A1.
PN
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22111 contains a phosphodiester backbone and has 2'-
XX O-(2-methoxyethyl) chemistry. It was used in experiments to determine the
XX effects of snake venom phosphodiesterase and liver homogenate on the
XX stability of oligonucleotides. Novel oligonucleotides of the invention
XX have both A- and B-form conformational geometry. The A-form geometry
XX modulates the binding affinity and nuclease resistance of the
XX oligonucleotide. The B-form geometry allows the oligonucleotide to serve
XX as substrate for RNase-H when bound to a target nucleic acid strand. The
XX oligonucleotides can be used to treat psoriasis and other inflammatory
XX skin conditions, skin cancers and viral, bacterial and fungal infections,
XX CC and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 779
AAAY1630/C
ID AAA71630 standard; DNA; 19 BP.
XX
XX AAA71630;
XX
XX 14-DEC-2000 (first entry)
XX
XX Phosphorothioate 20-mer primer DNA #1.
XX
XX Phosphorothioate; primer; oligomer synthesis; antisense therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkage"
XX
XX EP1028124-A2.
XX
XX 16-AUG-2000.
PD

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XX 06-SEP-1999; 99EP-00307066.
XX
XX 04-FEB-1999; 99US-0118564P.
XX
XX 09-APR-1999; 99US-00288679.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ravikumar VT, Manoharan M, Capaldi DC, Krotz A, Cole DL;
XX Guzaev A;
XX
XX WPI; 2000-500332/45.
XX
XX Novel method for the production of oligomers with reduced exocyclic
XX adducts comprises treatment with deprotecting and cleaving reagents.
XX
XX Example 2; Page 17; 33pp; English.
XX
XX This invention describes a novel synthetic method (M) comprising: (a)
XX providing a sample comprising a number of oligomers of formula (I); (b)
XX contacting the sample with a deprotecting agent to remove R_t groups from
XX the oligomers; and (c) reacting the oligomer with a cleaving reagent. The
XX method is used to produce oligomeric compounds for use in antisense and
XX oligonucleotide therapies. The method enables the synthesis of oligomers
XX with a reduction in the number acrylonitrile groups attached.
XX Acrylonitrile has been demonstrated to be a potent carcinogen in rats.
XX This sequence represents a phosphorothioate 20-mer primer which is used
XX in the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 780
AAC62454/C
ID AAC62454 standard; DNA; 19 BP.
XX
XX AAC62454;
XX
XX 07-FEB-2001 (first entry)
XX
XX Cleavage of nucleic acids from solid supports assay oligonucleotide #3.
XX
XX Nucleic acid cleavage; solid support; DNA-RNA hybrid;
XX affinity chromatography; sequencing; mutagenesis; DNA preparation;
XX nucleic acid purification; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_RNA 10
FT /*tag= a
XX
XX WO200058329-A1.
XX
XX 05-OCT-2000.
XX
XX 28-MAR-2000; 2000WO-GB001190.
XX
XX 29-MAR-1999; 99GB-00007245.
XX
XX (GOLD/) GOLDSBOROUGH A.
XX
XX WPI; 2000-664908/64.
XX
XX Detaching nucleic acid molecule comprising unconventional nucleotide
XX

```

PT incorporated at predetermined site from a solid support involves cleaving
 FT the nucleic acid molecule at the site of unconventional nucleotide.

Example 3; Page 34; 47pp; English.

The present invention is concerned with the cleavage of nucleic acids
 from solid supports. This is carried out by adding a non-conventional
 nucleotide into the nucleic acid attached to the support, so that it is
 recognised and cleaved by a specific DNA glycosylase and the sequence is
 released. This is useful in many molecular biological procedures such as
 sequencing, in vitro amplifications, cDNA and template preparation, DNA-
 based assays, mutagenesis procedures, nucleic acid purification and
 affinity chromatography. The present sequence is an oligonucleotide used
 in assays to demonstrate the methods of the invention

XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||

RESULT 781
 AAF31458/c
 ID AAF31458 standard; DNA; 19 BP.
 XX AAF31458;
 AC

DT 10-APR-2001 (first entry)
 XX Oligonucleotide ISIS 109989.
 DE

XX Gene expression; gene therapy; diagnosis; ss.

OS Synthetic.

PN WO200102423-A2.

XX 11-JAN-2001.

XX 07-JUL-2000; 2000WO-US018609.

XX 07-JUL-1999; 99US-00349040.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Cook PD, Prakash TP, Mohan V;

XX WPI; 2001-138119/14.

XX Quantidium functionalized oligomers prepared from corresponding monomer
 PT units, are hybridizable with a specific RNA or DNA sequence, useful for
 PT diagnostic and therapeutic purposes.

XX Example 26; Page 54; 108pp; English.

CC The present invention relates to nucleotide oligomers comprising monomer
 CC units. Oligomers modulate gene expression when hybridized by a single- or
 CC double-stranded nucleic acid. They are useful for gene therapy,
 CC diagnostic and investigative purposes

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 782
 AAF31564/c

ID AAF31564 standard; DNA; 19 BP.

XX AAF31564;

XX 09-APR-2001 (first entry)

XX ISIS sequence 32327.

XX DNA/RNA hybrid; oligomer; C3' methylene hydrogen phosphate; AIDS;
 KW atherosclerosis; ss.

XX Synthetic.

XX WO200102419-A1.

XX 11-JAN-2001.

XX 05-JUL-2000; 2000WO-US040304.

XX 07-JUL-1999; 99US-00349033.

XX (ISIS-) ISIS PHARM INC.

XX Cook PD, Manoharan M, Maier M, An H;

XX WPI; 2001-138117/14.

XX New oligomers for use as research reagent, for treating disease caused by
 PT undesired production of proteins, and for diagnosing and treating AIDS,
 PT atherosclerosis.

XX Example 46; Page 74; 110pp; English.

XX The present invention relates to C3' methylene hydrogen phosphate
 CC oligomers. The oligomers may be used as research reagents, for treating
 CC disease caused by undesired production of proteins and for diagnosing and
 CC treating AIDS and atherosclerosis

XX Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||

RESULT 783
 AAH46460/c

ID AAH46460 standard; DNA; 19 BP.

XX AAH46460;

XX 14-SEP-2001 (first entry)

XX Oligonucleotide #8.

XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..19

FT /*tag= a

FT /mod_base= OTHER

FT /note= "All bases are phosphorothioate"

XX PA (ISIS-) ISIS PHARM INC.
 XX FI Crooke ST, Lima WF, Wu H, Manoharan M;
 XX DR WPI; 2001-343164/36.
 XX PT Chimeric oligonucleotides that can serve as substrates for human RNase
 XX PT HI, useful for enhancing the effectiveness of antisense gene therapies.
 XX PS Example 54; Page 88; 178pp; English.
 XX CC The present invention provides a number of DNA-RNA oligonucleotides which
 XX CC can act as substrates for human RNase HI (a type II RNase). The sequence
 XX CC consists of two portions, one of which is capable of supporting cleavage
 XX CC of a complementary target RNA and the other of which is incapable of
 XX CC supporting such cleavage. These can be used to enhance the effectiveness
 XX CC of antisense therapies. The present sequence is an RNase H substrate used
 XX CC in the exemplification of the invention
 XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 786
 AAC83664/c
 ID AAC83664 standard; DNA; 19 BP.
 AC AAC83664;
 XX
 DT 02-MAR-2001. (first entry)
 XX
 DE 2'-O-N-[2-(dimethylamino)ethylacetamido]-modified oligo ISIS #32335.
 XX
 KW 2'-O-acetamido; diagnostic; kinase modulator; nuclease resistance;
 KW tumour formation; cancer; protein kinase C expression;
 KW cell adhesion molecule expression; multidrug resistance; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16..19
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-N-[2-(dimethylamino)ethylacetamido]5MeU"
 XX
 PN US6147200-A.
 XX
 PD 14-NOV-2000.
 XX
 PF 19-AUG-1999; 99US-00378568.
 XX
 PR 19-AUG-1999; 99US-00378568.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX Manoharan M, Cook PD, Fraser AS, Prakash TP, Kawasaki AM;
 XX WPI; 2001-069824/08.
 XX
 XX New 2'-O-acetamido modified nucleosides (I) used to produce
 XX PT oligonucleotides which have enhanced nuclease resistance and superior
 XX PT hybridization properties than prior art.
 XX PS Example 12; Col 28; 29pp; English.
 XX

CC The present sequence is a modified oligonucleotide. 2'-O-acetamido-
 CC modified nucleosides were used to produce oligonucleotides which have
 CC enhanced nuclease resistance and superior hybridisation properties than
 CC prior art. The oligomeric compounds are useful for identification or
 CC quantification of ribonucleic acid and deoxyribonucleic acid or for
 CC modulating the activity of an ribonucleic acid or deoxyribonucleic acid
 CC molecule. They have a modified nucleoside monomer and are specifically
 CC hybridisable with a preselected nucleotide sequence of a single-stranded
 CC or double-stranded target deoxyribonucleic acid or ribonucleic acid
 CC molecule. The oligomers are further useful in a ras-luciferase fusion
 CC system using ras-luciferase transactivation. They are useful in abnormal
 CC cell proliferation and tumour formation and modulation of expression of
 CC protein kinase C and cell adhesion molecules such as ICAM. They are
 CC useful in the modulation of proteins related to multidrug resistance and
 CC viral genomic nucleic acids such as HIV, herpes viruses, Epstein-Barr
 CC virus, cytomegalovirus, papillomavirus, hepatitis C virus and influenza
 CC virus
 XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 787
 AAK98526/c
 ID AAK98526 standard; DNA; 19 BP.
 XX
 AC AAK98526;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Nucleic acid quantitative analysis related oligonucleotide #1.
 XX
 KW Target detection; quantitative analysis; probe; medical diagnosis;
 KW forensics; bacterial screening; tissue typing; gene expression analysis;
 KW genotyping; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "modified by thiol"
 XX
 PN WQ200202810-A2.
 XX
 PD 10-JAN-2002.
 XX
 PF 02-JUL-2001; 2001WO-EP007575.
 XX
 PR 01-JUL-2000; 2000DE-01033334.
 XX
 XX (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
 XX Bickel R, Ehrlich R, Ellinger T, Ermantraut E, Kaiser T;
 XX Schulz T, Wagner G;
 XX WPI; 2002-154760/20.
 XX
 XX Determining targets by interaction with probe array, useful e.g. for
 XX PT diagnosis, based on detecting formation of precipitate at specific probe
 XX PT sites.
 XX PS Example 5; Page 47; 92pp; German.
 XX
 XX The present invention relates to a method for the qualitative and

CC quantitative detection of targets in a sample by molecular interaction
 CC between the target and probes in an array. The method can be used to
 CC detect interactions between nucleic acids, antigens and antibodies or
 CC receptor and ligands, particularly in applications such as medical
 CC diagnosis, forensic science, bacterial screening, tissue typing for
 CC transplantation, monitoring gene expression, and genotyping. The present
 CC sequence is a modifying oligonucleotide used in the exemplification of
 CC the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 788
 ABA91949/c
 ID ABA91949 standard; DNA; 19 BP.
 XX
 AC ABA91949;
 XX
 DT 23-MAY-2002 (first entry)
 XX
 DE Methyl thioethyl modified oligonucleotide.
 XX
 KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT
 FT
 XX US6277982-B1.
 XX
 XX 21-AUG-2001.
 XX
 XX 20-AUG-1999; 99US-00378665.
 XX
 XX 20-AUG-1999; 99US-00378665.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
 XX WPI; 2002-235143/29.
 XX
 XX Alkylation of alcohols, amines, or thiols, useful for preparing
 XX nucleosides that are precursors for preparation of oligomeric compounds
 XX beneficial as therapeutics, involves use of cyclic sulfate intermediates.
 XX
 XX Example 15; Col 35; 45pp; English.
 XX
 XX The present sequence is that of a chimeric oligonucleotide having some 2'

CC -methyl thioethyl modifications. This was compared with oligonucleotides
 CC with methoxyethoxy (see ABA91950) and dimethylaminopropyl (see ABA91951)
 CC modifications for resistance to snake venom phosphodiesterase. The assay
 CC revealed the nuclease resistance of the modified oligomers. The invention
 CC provides methods for the alkylation of alcohols, amines, thiols and their
 CC derivatives by cyclic sulfate intermediates. In particular, methods for
 CC the alkylation of the 2', 3' or 5'-hydroxy position of nucleosides and
 CC their analogues with cyclic sulfates to form the 2', 3' or 5'-O-alkyl
 CC sulfate modified compounds are disclosed. Displacement of the 2', 3' or
 CC 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-modified
 CC nucleosides and their analogues. The methods are especially useful for
 CC the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside
 CC surrogates that are precursors for the preparation of oligomeric
 CC compounds useful as therapeutics, diagnostics and research reagents
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 789
 ABA91951/c
 ID ABA91951 standard; DNA; 19 BP.
 XX
 AC ABA91951;
 XX
 DT 23-MAY-2002 (first entry)
 XX
 DE Dimethylaminopropyl modified oligonucleotide.
 XX
 KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT
 FT
 XX US6277982-B1.
 XX
 XX 21-AUG-2001.
 XX
 XX 20-AUG-1999; 99US-00378665.
 XX
 XX 20-AUG-1999; 99US-00378665.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
 XX WPI; 2002-235143/29.
 XX
 XX Alkylation of alcohols, amines, or thiols, useful for preparing

PT nucleosides that are precursors for preparation of oligomeric compounds
 PT beneficial as therapeutics, involves use of cyclic sulfate intermediates.
 XX
 PS Example 15; Col 35; 45pp; English.

XX The present sequence is that of a chimeric oligonucleotide having some 2'
 CC -dimethylaminopropyl modifications. This was compared with
 CC oligonucleotides with methyl thioethyl (see ABA91949) and methoxyethoxy
 CC (see ABA91950) modifications for resistance to snake venom
 CC phosphodiesterase. The assay revealed the nuclease resistance of the
 CC modified oligomers. The invention provides methods for the alkylation of
 CC alcohols, amines, thiols and their derivatives by cyclic sulfate
 CC intermediates. In particular, methods for the alkylation of the 2', 3' or
 CC 5'-hydroxy position of nucleosides and their analogues with cyclic
 CC sulfates to form the 2', 3' or 5'-O-alkyl sulfate modified compounds are
 CC disclosed. Displacement of the 2', 3' or 5'-O-sulfate with a nucleophile
 CC provides 2', 3' or 5'-O-modified nucleosides and their analogues. The
 CC methods are especially useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates that are precursors
 CC for the preparation of oligomeric compounds useful as therapeutics,
 CC diagnostics and research reagents

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 790
 ABA91950/c

ID ABA91950 standard; DNA; 19 BP.
 AC ABA91950;

DT 23-MAY-2002 (first entry)

DE Methoxyethoxy modified oligonucleotide.

XX 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
 XX Synthetic.

PH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy thymidine"

XX US6277982-B1.

XX 21-AUG-2001.

XX 20-AUG-1999; 99US-00378665.

XX 20-AUG-1999; 99US-00378665.

XX

(ISIS-) ISIS PHARM INC.

XX Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;

XX WPI; 2002-235143/29.

XX Alkylation of alcohols, amines, or thiols, useful for preparing
 PT nucleosides that are precursors for preparation of oligomeric compounds
 PT beneficial as therapeutics, involves use of cyclic sulfate intermediates.
 XX
 PS Example 15; Col 35; 45pp; English.

XX The present sequence is that of a chimeric oligonucleotide having some 2'
 CC -methoxyethoxy modifications. This was compared with oligonucleotides
 CC with methyl thioethyl (see ABA91949) and dimethylaminopropyl (see
 CC ABA91951) modifications for resistance to snake venom phosphodiesterase.
 CC The assay revealed the nuclease resistance of the modified oligomers. The
 CC invention provides methods for the alkylation of alcohols, amines, thiols
 CC and their derivatives by cyclic sulfate intermediates. In particular,
 CC methods for the alkylation of the 2', 3' or 5'-hydroxy position of
 CC nucleosides and their analogues with cyclic sulfates to form the 2', 3'
 CC or 5'-O-alkyl sulfate modified compounds are disclosed. Displacement of
 CC the 2', 3' or 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-
 CC modified nucleosides and their analogues. The methods are, especially
 CC useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and
 CC nucleoside surrogates that are precursors for the preparation of
 CC oligomeric compounds useful as therapeutics, diagnostics and research
 CC reagents

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 791
 ABL51520/c

ID ABL51520 standard; DNA; 19 BP.

AC ABL51520;

DT 01-JUL-2002 (first entry)

XX Tailing reaction related exemplary primer biotin-dT18U SEQ ID NO:1.

DE Tailing reaction; tailed primer; primer; probe; identification;
 KW detection; linear amplification scheme; chain extending enzyme;
 KW telomerase; ss.

XX Synthetic.

PH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "biotinylated"
 FT misc_RNA 19
 FT /*tag= b

XX US2002031776-A1.

XX 14-MAR-2002.

XX 26-JUL-2001; 2001US-00917138.

XX 28-MAY-1999; 99US-0136545P.

XX 25-MAY-2000; 2000US-00580358.

XX


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PA (TULL/) TULLIS R H.
PA (STRE/) STREIFEL J A.
XX
XX Tullis RH, Streifel JA;
XX
XX WPI; 2002-361176/39.
XX
XX Identifying and detecting nucleic acids, particularly DNA hybridization
PT probes, involves employing chain extending enzymes (e.g. telomerase) to
PT elongate probes to render them readily detectable.
XX
XX Example 1; Page 5; 10pp; English.
XX
XX The present invention describes a method for detecting a nucleic acid
CC probe, which comprises using chain extending enzymes to elongate probes.
CC The method comprises: (a) treating the sample with a chain terminating
CC reagent to prevent polynucleotide chain growth from the nucleic acid in
CC the sample; (b) contacting the sample with the probe containing a
CC terminus capable of elongation by a chain extending enzyme, where the
CC probe hybridises to the nucleic acid in the sample; (c) contacting the
CC sample with a chain extending enzyme and its substrates, which elongates
CC the probe; and (d) detecting the elongated hybridised probe. Also
CC described is a method comprising: (a) treating nucleic acid molecules or
CC modified nucleic acids in a sample with a reagent or reagents that render
CC the nucleic acid chains unextendable by a non-template-dependent enzyme;
CC (b) hybridising the treated molecules with a nucleic acid probe that
CC includes an extendable terminus, under conditions where hybrids form; and
CC (c) treating any hybrids formed with a non-template dependent chain
CC elongating enzyme and its substrates, where any hybridised probe is
CC extended. The method is useful for identifying and detecting nucleic
CC acids, particularly DNA hybridisation probes. The present sequence
CC represents a tailing reaction exemplary primer, which is used in an
CC example from the present invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 792
AAD42000/c
ID AAD42000 standard; DNA; 19 BP.
XX
XX AAD42000;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #3 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH modified_base 15..18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy (MOE) residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.

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XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
XX Example 46; Col 31; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutic, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 793
AAD42002/c
ID AAD42002 standard; DNA; 19 BP.
XX
XX AAD42002;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #5 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-methoxyethyl residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving

```

PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 XX cooling and reacting with ester.
 PS Example 46; Col 33; 24pp; English.
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 794
 AAD42004/c
 ID AAD42004 standard; DNA; 19 BP.
 XX
 AC AAD42004;
 XX
 DT 04-NOV-2002 (first entry)
 XX
 DE Oligonucleotide #7 used to illustrate the method of the invention.
 XX
 KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-methyl, 2'-dimethylaminoxyethyl residue"
 XX
 PN US6403779-B1.
 XX
 PD 11-JUN-2002.
 XX
 PF 08-JAN-1999; 99US-00227782.
 XX
 PR 08-JAN-1999; 99US-00227782.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 XX WPI; 2002-546338/58.
 XX
 PT Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 PT for preparation of 2'-O-alkylated compounds comprises dissolving
 PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 PT cooling and reacting with ester.
 XX
 PS Example 46; Col 33; 24pp; English.
 XX
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 795
 AAD42010/c
 ID AAD42010 standard; DNA; 19 BP.
 XX
 AC AAD42010;
 XX
 DT 04-NOV-2002 (first entry)
 XX
 DE Oligonucleotide #13 used to illustrate the method of the invention.
 XX
 KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16..19
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"
 FT modified_base 18..19
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 PN US6403779-B1.
 XX
 PD 11-JUN-2002.
 XX
 PF 08-JAN-1999; 99US-00227782.
 XX
 PR 08-JAN-1999; 99US-00227782.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 XX WPI; 2002-546338/58.
 XX
 PT Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 PT for preparation of 2'-O-alkylated compounds comprises dissolving
 PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 PT cooling and reacting with ester.
 XX
 PS Example 46; Col 35; 24pp; English.
 XX
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

```

CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 796
AAD42020/C
ID AAD42020 standard; DNA; 19 BP.
XX
AC AAD42020;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #23 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methyleneiminoxyethyl thymidine"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 41; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleotides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

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Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 797
AAD42001/C
ID AAD42001 standard; DNA; 19 BP.
XX
AC AAD42001;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #4 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /*tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-dimethylaminoxyethyl residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
XX nucleoside in aprotic solvent, cooling, treating with base, warming,
XX cooling and reacting with ester.
XX
XX Example 46; Col 31; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
XX of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX The method involves dissolving the nucleoside in at least one aprotic
XX solvent, cooling, treating with base, warming, cooling and reacting with
XX a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX nucleotides, nucleosides and nucleoside surrogates used for preparation
XX of oligomeric compounds having improved hybridisation affinity and
XX nuclear resistance, which are useful as therapeutics, diagnostics and
XX research reagents. The present sequence is a modified oligonucleotide
XX used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 798
AAD42011/C
ID AAD42011 standard; DNA; 19 BP.
XX
AC AAD42011;

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XX DT 04-NOV-2002 (first entry)
XX DE Oligonucleotide #14 used to illustrate the method of the invention.
XX KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT modified_base 16..19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"
XX PN US6403779-B1.
XX PD 11-JUN-2002.
XX PF 08-JAN-1999; 99US-00227782.
XX PR 08-JAN-1999; 99US-00227782.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX PS WPI; 2002-546338/58.
XX CC Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX CC for preparation of 2'-O-alkylated compounds comprises dissolving
XX CC nucleoside in aprotic solvent, cooling, treating with base, warming,
XX CC cooling and reacting with ester.
XX PS Example 46; Col 37; 24pp; English.
XX CC The present invention relates to a novel method of selective alkylation
XX CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX CC The method involves dissolving the nucleoside in at least one aprotic
XX CC solvent, cooling, treating with base, warming, cooling and reacting with
XX CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX CC nucleotides, nucleosides and nucleoside surrogates used for preparation
XX CC of oligomeric compounds having improved hybridisation affinity and
XX CC nuclear resistance, which are useful as therapeutics, diagnostics and
XX CC research reagents. The present sequence is a modified oligonucleotide
XX CC used to illustrate the method of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 799
AAD42005/C
ID AAD42005 standard; DNA; 19 BP.
XX AC AAD42005;
XX DT 04-NOV-2002 (first entry)
XX DE Oligonucleotide #8 used to illustrate the method of the invention.
XX KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX OS Unidentified.

```

```

XX FH Key Location/Qualifiers
XX FT modified_base 18
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "5-methyl, 2'-methoxyethyl residues"
XX PN US6403779-B1.
XX PD 11-JUN-2002.
XX PF 08-JAN-1999; 99US-00227782.
XX PR 08-JAN-1999; 99US-00227782.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX PS WPI; 2002-546338/58.
XX CC Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX CC for preparation of 2'-O-alkylated compounds comprises dissolving
XX CC nucleoside in aprotic solvent, cooling, treating with base, warming,
XX CC cooling and reacting with ester.
XX PS Example 46; Col 33; 24pp; English.
XX CC The present invention relates to a novel method of selective alkylation
XX CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
XX CC The method involves dissolving the nucleoside in at least one aprotic
XX CC solvent, cooling, treating with base, warming, cooling and reacting with
XX CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
XX CC nucleotides, nucleosides and nucleoside surrogates used for preparation
XX CC of oligomeric compounds having improved hybridisation affinity and
XX CC nuclear resistance, which are useful as therapeutics, diagnostics and
XX CC research reagents. The present sequence is a modified oligonucleotide
XX CC used to illustrate the method of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 800
AAD42003/C
ID AAD42003 standard; DNA; 19 BP.
XX AC AAD42003;
XX DT 04-NOV-2002 (first entry)
XX DE Oligonucleotide #6 used to illustrate the method of the invention.
XX KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT modified_base 16..19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "5-methyl, 2'-O-propyl residues"
XX PN US6403779-B1.
XX

```

```

PD 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX Example 46; Col 33; 24pp; English.
PS
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 801
AAD41998/c
ID AAD41998 standard; DNA; 19 BP.
XX
XX AAD41998;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #1 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-aminooxyethoxy (2'-AOE) residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI

```

```

XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX Example 46; Col 31; 24pp; English.
PS
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 802
AAD41999/c
ID AAD41999 standard; DNA; 19 BP.
XX
XX AAD41999;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #2 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-dimethylaminooxyethoxy (2'-DMAOE)
XX residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX

```

PS Example 46; Col 31; 24pp; English.

CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 803
 AAD42009/c

ID AAD42009 standard; DNA; 19 BP.

XX AC AAD42009;

XX DT 04-NOV-2002 (first entry)

XX DE Oligonucleotide #12 used to illustrate the method of the invention.

XX KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers
 FT modified_base 15..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"

XX US6403779-B1.

XX 11-JUN-2002.

XX 08-JAN-1999; 99US-00227782.

XX 08-JAN-1999; 99US-00227782.

XX (ISIS-) ISIS PHARM INC.

XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 WPI; 2002-546338/58.

XX Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 FT for preparation of 2'-O-alkylated compounds comprises dissolving
 FT nucleoside in aprotic solvent, cooling, treating with base, warming,
 FT cooling and reacting with ester.

XX Example 46; Col 35; 24pp; English.

XX CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and

CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 804
 ABZ58336/c

ID ABZ58336 standard; DNA; 19 BP.

XX AC ABZ58336;

XX DT 28-APR-2003 (first entry)

XX DE Oligonucleotide with 2'-O-(2-(methylthio)ethyl)-5-methyluridine.

XX KW Oligonucleotide; 2'-O-(2-(methylthio)ethyl)-5-methyluridine; antisense;
 XX DNA-RNA hybrid; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

XX WO2003004603-A2.

XX 16-JAN-2003.

XX 01-JUL-2002; 2002WO-US020940.

XX 03-JUL-2001; 2001US-0302683P.

XX 28-JAN-2002; 2002US-00058740.

XX (ISIS-) ISIS PHARM INC.

XX Prakash TP, Manoharan M;
 WPI; 2003-239204/23.

XX Increasing binding of oligomeric compound to proteins useful in
 FT preparation of antisense therapeutics, involves use of modified
 FT oligomeric compound having oligonucleotide group.

XX Example 27; Page 72; 122pp; English.

XX CC The present sequence is an example of an oligonucleotide of the invention
 CC containing 2'-O-(2-(methylthio)ethyl)-5-methyluridine (2'-O-(MTE)-5-
 CC methyluridine) modifications. In examples of the invention, 2'-O-MTE was
 CC incorporated into oligonucleotides and evaluated for antisense properties

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CC in comparison with the known 2'-O-(2-methoxyethyl) (2'-O-MOE)
CC modification. The 2'-O-MTE modified oligonucleotides exhibited similar
CC binding affinity to target RNA as their 2'-O-MOE equivalent while binding
CC to human serum albumin was improved. The modification can be used to
CC modulate the pharmacokinetics of oligonucleotides, e.g. in antisense
CC therapy
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;

  Query Match      0.7%; Score 19; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 7.7e+02;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 805
ADE99245/c
ID ADE99245 standard; DNA; 19 BP.
AC ADE99245;
XX
DT 12-FEB-2004 (first entry)
XX
DE Modified oligomeric compound #5.
XX
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.
XX
OS Synthetic.
XX
US6600032-B1.
XX
PD 29-JUL-2003.
XX
PF 06-AUG-1999; 99US-00370625.
XX
PR 07-AUG-1998; 98US-00130566.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
WPI; 2003-895259/82.
XX
New oligomeric compound having at least one nucleoside useful for
therapeutic and investigative purposes e.g. for treating hepatitis C
virus infection.
XX
Disclosure; SEQ ID NO 5; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

  Query Match      0.7%; Score 19; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 7.7e+02;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 806
ADE99245/c
ID ADE99245 standard; DNA; 19 BP.
AC ADE99245;
XX
DT 12-FEB-2004 (first entry)
XX
DE Modified oligomeric compound #26.
XX
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.
XX
OS Synthetic.
XX
US6600032-B1.
XX
PD 29-JUL-2003.
XX
PF 06-AUG-1999; 99US-00370625.
XX
PR 07-AUG-1998; 98US-00130566.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
WPI; 2003-895259/82.
XX
New oligomeric compound having at least one nucleoside useful for
therapeutic and investigative purposes e.g. for treating hepatitis C
virus infection.
XX
Disclosure; SEQ ID NO 5; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

  Query Match      0.7%; Score 19; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 7.7e+02;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 807
ADH97218/c
ID ADH97218 standard; DNA; 19 BP.
AC ADH97218;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #7.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
Key Location/Qualifiers
FT modified_base 19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
US6534639-B1.

```

```

ID ADE99265 standard; DNA; 19 BP.
XX
AC ADE99265;
XX
DT 12-FEB-2004 (first entry)
XX
DE Modified oligomeric compound #26.
XX
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.
XX
OS Synthetic.
XX
US6600032-B1.
XX
PD 29-JUL-2003.
XX
PF 06-AUG-1999; 99US-00370625.
XX
PR 07-AUG-1998; 98US-00130566.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
WPI; 2003-895259/82.
XX
New oligomeric compound having at least one nucleoside useful for
therapeutic and investigative purposes e.g. for treating hepatitis C
virus infection.
XX
Disclosure; SEQ ID NO 26; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

  Query Match      0.7%; Score 19; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 7.7e+02;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 807
ADH97218/c
ID ADH97218 standard; DNA; 19 BP.
AC ADH97218;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #7.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
Key Location/Qualifiers
FT modified_base 19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
US6534639-B1.

```



```

PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX
PT Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide
PT units.
XX
PS Example 26; SEQ ID NO 7; 51pp; English.
XX
CC This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified
CC oligonucleotide of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 808
ADH97214/c
ID ADH97214 standard; DNA; 19 BP.
XX
AC ADH97214;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #3.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX
US6534639-B1.
XX
PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX
PT Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide

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PT units.
XX
PS Example 26; SEQ ID NO 3; 51pp; English.
XX
CC This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified
CC oligonucleotide of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 809
ADH97224/c
ID ADH97224 standard; DNA; 19 BP.
XX
AC ADH97224;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #13.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
FT modified_base 19
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX
US6534639-B1.
XX
PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX
PT Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide
PT units.
XX
PS Example 26; SEQ ID NO 13; 51pp; English.
XX
CC This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified

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ID  ADG48004 standard; DNA; 19 BP.
AC  ADG48004;
XX
DT  11-MAR-2004 (first entry)
XX
DE  Oligonucleotide #11 used in the exemplification of the invention.
XX
KW  Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 17
FT  /tag= a
FT  /mod_base= OTHER
FT  modified_base 19
FT  /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
FT  /tag= b
FT  /mod_base= OTHER
FT  /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
PN  US2003092046-A1.
XX
XX  15-MAY-2003.
XX
XX  20-SEP-2002; 2002US-00247893.
XX
XX  07-JUL-1999; 99US-00349040.
XX  07-JUL-2000; 2000US-00612531.
XX
XX  (MANO/) MANOHARAN M.
XX  (COOK/) COOK P D.
XX  (PRAK/) PRAKASH T P.
XX  (MOHA/) MOHAN V.
XX
PI  Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX  WPI; 2004-031184/03.
XX
XX  New oligomers containing guanidinium groups, useful for modulating gene
XX  expression by hybridizing oligomer with single- or double-stranded
XX  nucleic acids.
XX
XX  Example 26; SEQ ID NO 13; 54pp; English.
XX
XX  The present invention relates to novel oligonucleotides comprising
XX  several nucleotide units which are specifically hybridisable with a
XX  selected sequence of RNA or DNA wherein at least one of the nucleotide
XX  moieties of the oligomer is modified to include a guanidinium group.
XX  These oligonucleotides are useful for diagnostic, therapeutic and
XX  investigative purposes. The present sequence is an oligonucleotide used
XX  in the exemplification of the invention.
XX
SQ  Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAA 2727
Db  19 AAAAAAAAAAAAAAAAAA 1

RESULT 813
ADG47998/c
ID  ADG47998 standard; DNA; 19 BP.
XX
XX  ADG47998;
XX
XX  11-MAR-2004 (first entry)
XX

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DE  Oligonucleotide #5 used in the exemplification of the invention.
XX
XX  Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
XX  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 19
FT  /tag= a
FT  /mod_base= OTHER
FT  /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
PN  US2003092046-A1.
XX
XX  15-MAY-2003.
XX
XX  20-SEP-2002; 2002US-00247893.
XX
XX  07-JUL-1999; 99US-00349040.
XX  07-JUL-2000; 2000US-00612531.
XX
XX  (MANO/) MANOHARAN M.
XX  (COOK/) COOK P D.
XX  (PRAK/) PRAKASH T P.
XX  (MOHA/) MOHAN V.
XX
PI  Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX  WPI; 2004-031184/03.
XX
XX  New oligomers containing guanidinium groups, useful for modulating gene
XX  expression by hybridizing oligomer with single- or double-stranded
XX  nucleic acids.
XX
XX  Example 26; SEQ ID NO 7; 54pp; English.
XX
XX  The present invention relates to novel oligonucleotides comprising
XX  several nucleotide units which are specifically hybridisable with a
XX  selected sequence of RNA or DNA wherein at least one of the nucleotide
XX  moieties of the oligomer is modified to include a guanidinium group.
XX  These oligonucleotides are useful for diagnostic, therapeutic and
XX  investigative purposes. The present sequence is an oligonucleotide used
XX  in the exemplification of the invention.
XX
SQ  Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAA 2727
Db  19 AAAAAAAAAAAAAAAAAA 1

RESULT 814
ADH42933/c
ID  ADH42933 standard; DNA; 19 BP.
XX
XX  ADH42933;
XX
XX  25-MAR-2004 (first entry)
XX
XX  Guanidinium functionalised oligonucleotide ISIS #109973.
XX
XX  ss; guanidinium functionalised nucleotide; guanidinium;
XX  2-O-guanidinium ethyl; increased binding affinity.
XX
XX  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 19
FT  /tag= a

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FT /mod_base= OTHER
FT /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 5; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 815
XX ADH42931/c
XX ID ADH42931 standard; DNA; 19 BP.
XX
XX AC ADH42931;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109990.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 5; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 815
XX ADH42931/c
XX ID ADH42931 standard; DNA; 19 BP.
XX
XX AC ADH42931;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109990.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 4; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide

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XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 3; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 816
XX ADH42932/c
XX ID ADH42932 standard; DNA; 19 BP.
XX
XX AC ADH42932;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109989.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 17
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX modified_base 19
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 4; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide

```

CC compounds. The guanidinium functionalised nucleotide compounds are used
 CC for preparation of oligomers useful for diagnostic, therapeutic and
 CC investigative applications. The 2'-O-guanidinium ethyl modification
 CC increases binding affinity to a target. The present sequence represents a
 CC guanidinium functionalised oligonucleotide.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 817

ADJ77769/c
 ID ADJ77769 standard; DNA; 19 BP.

AC ADJ77769;

DT 06-MAY-2004 (first entry)

DE Modified antisense oligonucleotide #5.

XX 2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
 KW antisense oligonucleotide; ss.
 XX Synthetic.

OS
 XX
 PN US6673912-B1.
 XX
 PD 06-JAN-2004.

XX 11-APR-2002; 2002US-00121135.
 PF
 XX 07-AUG-1998; 98US-00130566.
 PR
 XX 06-AUG-1999; 99US-00370625.
 XX

PA (ISIS-) ISIS PHARM INC.
 XX
 PI Manoharan M, Cook PD;
 XX
 XX WPI; 2004-106293/11.

DR
 XX
 XX
 PT New 2'-O-aminoethylthioethyl-modified ribosyl nucleosides useful as
 PT monomer for the synthesis of modified anti-sense oligonucleotides.
 XX
 PS Disclosure; SEQ ID NO 5; 26pp; English.

CC The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl
 CC nucleosides. The modified ribosyl nucleosides are used as monomers for
 CC the synthesis of modified antisense oligonucleotides, which are useful in
 CC diagnosis and therapeutics (e.g. in gene therapy, for treating organisms
 CC having a disease associated by the undesired production of proteins) and
 CC as research reagents. The oligonucleotides obtained from the monomers
 CC show enhanced hybrid binding affinity towards targeted DNA or RNA and
 CC resistance towards nucleases. This sequence represents a modified
 CC antisense oligonucleotide of the invention.
 XX

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 818

ADJ77789/c
 ID ADJ77789 standard; DNA; 19 BP.

AC ADJ77789;

XX 06-MAY-2004 (first entry)

DE Modified antisense oligonucleotide #25.

XX 2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
 KW antisense oligonucleotide; ss.
 XX Synthetic.

OS
 XX
 PN US6673912-B1.
 XX
 PD 06-JAN-2004.

XX 11-APR-2002; 2002US-00121135.
 PF
 XX 07-AUG-1998; 98US-00130566.
 PR
 XX 06-AUG-1999; 99US-00370625.
 XX

PA (ISIS-) ISIS PHARM INC.
 XX
 PI Manoharan M, Cook PD;
 XX
 XX WPI; 2004-106293/11.

XX New 2'-O-aminoethylthioethyl-modified ribosyl nucleosides useful as
 PT monomer for the synthesis of modified anti-sense oligonucleotides.
 XX
 PS Disclosure; SEQ ID NO 26; 26pp; English.
 XX

CC The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl
 CC nucleosides. The modified ribosyl nucleosides are used as monomers for
 CC the synthesis of modified antisense oligonucleotides, which are useful in
 CC diagnosis and therapeutics (e.g. in gene therapy, for treating organisms
 CC having a disease associated by the undesired production of proteins) and
 CC as research reagents. The oligonucleotides obtained from the monomers
 CC show enhanced hybrid binding affinity towards targeted DNA or RNA and
 CC resistance towards nucleases. This sequence represents a modified
 CC antisense oligonucleotide of the invention.
 XX

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 819

ADJ42087/c
 ID ADM42087 standard; DNA; 19 BP.

AC ADM42087;

XX 03-JUN-2004 (first entry)

DE Exemplary DNA molecule.

XX nanotube; nucleic acid sensor; DNA array; conductor; nanoparticle;
 KW biosensor; detection; screening; bacterial; viral; pharmaceutical;
 KW agricultural; food control; hygiene; environmental; forensic;
 KW nano-scale conductor; semiconductor; nano-electronic; prostatic nerve;
 KW bio-electronic interface; transistor; gated device; ss.

OS Synthetic.


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XX PN US2004009938-A1.
XX PD 15-JAN-2004.
XX PF 06-FEB-2003; 2003US-00359328.
XX PR 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX PA (MANO/) MANOHARAN M.
XX PA (COOK/) COOK P D.
XX PI Manoharan M, Cook PD;
XX WIPI; 2004-201317/19.
XX PT Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX PT therapeutic applications involves incorporating at least one modified
XX PT ribosyl nucleoside into the oligomeric compound.
XX PS Example 19; SEQ ID NO 26; 21pp; English.
XX CC The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX CC enhancing renal uptake of an oligomeric compound. The method is useful
XX CC for enhancing renal uptake of an oligomeric compound. The sequences of
XX CC the invention are useful in diagnostics, therapeutics and as research
XX CC reagents; and for treating infection caused by organisms (e.g. bacteria,
XX CC yeast, protozoa and algae) in plants and higher animals. The present
XX CC sequence is an oligonucleotide used in animal studies. This sequence is
XX CC used to illustrate the method of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 822
ADO58942/c
ID ADO58942 standard; DNA; 19 BP.
XX AC ADO58942;
XX DX 09-SEP-2004 (first entry)
XX DE Tobacco cytochrome P450 PCR primer #6.
XX KW ss; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX OS Nicotiana sp.
XX PN US2004117869-A1.
XX PD 17-JUN-2004.
XX PF 12-MAR-2003; 2003US-00387346.
XX PR 11-JAN-2002; 2002US-0347444P.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PR 10-JAN-2003; 2003US-00340861.
XX XX
XX PA (USSM-) US SMOKELESS TOBACCO CO.
XX PI Xu D;
XX WIPI; 2004-449487/42.
XX PT An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX PT Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX PT transgenic plants.
XX PS Disclosure; SEQ ID NO 154; 82pp; English.
XX CC The invention relates to an isolated nucleic acid molecule (I),
XX CC comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX CC cytochrome P450 enzyme fragment sequences. (I) is useful for producing a

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PA (MANO/) MANOHARAN M.
PA (COOK/) COOK P D.
PI Manoharan M, Cook PD;
XX WIPI; 2004-201317/19.
XX PT Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX PT therapeutic applications involves incorporating at least one modified
XX PT ribosyl nucleoside into the oligomeric compound.
XX PS Example 19; SEQ ID NO 5; 21pp; English.
XX CC The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX CC enhancing renal uptake of an oligomeric compound. The method is useful
XX CC for enhancing renal uptake of an oligomeric compound. The sequences of
XX CC the invention are useful in diagnostics, therapeutics and as research
XX CC reagents; and for treating infection caused by organisms (e.g. bacteria,
XX CC yeast, protozoa and algae) in plants and higher animals. The present
XX CC sequence is an oligonucleotide used to illustrate enzymatic degradation
XX CC of 2'-O-modified oligomers. This sequence is used to illustrate the
XX CC method of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 823
ADO59136/c
ID ADO59136 standard; DNA; 19 BP.
XX AC ADO59136;
XX DX 09-SEP-2004 (first entry)
XX DE Tobacco cytochrome P450 PCR primer #6.
XX KW ss; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX OS Nicotiana sp.
XX PN US2004117869-A1.
XX PD 17-JUN-2004.
XX PF 12-MAR-2003; 2003US-00387346.
XX PR 11-JAN-2002; 2002US-0347444P.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PR 10-JAN-2003; 2003US-00340861.
XX XX
XX PA (USSM-) US SMOKELESS TOBACCO CO.
XX PI Xu D;
XX WIPI; 2004-449487/42.
XX PT An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX PT Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX PT transgenic plants.
XX PS Disclosure; SEQ ID NO 154; 82pp; English.
XX CC The invention relates to an isolated nucleic acid molecule (I),
XX CC comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX CC cytochrome P450 enzyme fragment sequences. (I) is useful for producing a

```


CC transgenic tobacco plant, which involves operably linking (I) with a
 CC promoter functioning in the plant to create a plant transformation vector,
 CC and transforming the plant with the plant transformation vector,
 CC selecting a plant cell transformed with the transformation vector, and
 CC regenerating a plant from the selected plant cell. The nucleic acid
 CC molecule is in an antisense orientation, sense orientation or is in a RNA
 CC interference orientation. The present sequence represents a PCR primer
 CC used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
 CC the invention.

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 824

ADR82260/c
 ID ADR82260 standard; DNA; 19 BP.

XX ADR82260;

DT 16-DEC-2004 (first entry)

DE Hepatitis C virus (HCV) oligonucleotide seqid 6759.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;
 KW RNA interference; RNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.

XX Hepatitis C virus.

PN WO2004080406-A2.

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 28-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 6759; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 825

ADR82257/c

ID ADR82257 standard; DNA; 19 BP.

XX ADR82257;

XX 16-DEC-2004 (first entry)

DE Hepatitis C virus (HCV) oligonucleotide seqid 6756.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;
 KW RNA interference; RNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.

XX Hepatitis C virus.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 PA (ALNY-) ALNYLAM PHARM.
 XX
 PI Manoharan M, Bumcrot D;
 XX
 XX WPI; 2004-677362/66.
 DR
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 PS Example 5; SEQ ID NO 6756; 378pp; English.
 XX
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.78; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 826
 ADR82261/c
 ID ADR82261 standard; DNA; 19 BP.
 XX
 AC ADR82261;
 XX

DT 16-DEC-2004 (first entry)
 DE Hepatitis C virus (HCV) oligonucleotide seqid 6760.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO2004080406-A2.
 XX
 XX 23-SEP-2004.
 PD
 XX
 PF 08-MAR-2004; 2004WO-US007070.
 XX
 XX 07-MAR-2003; 2003US-0452682P.
 PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0493986P.
 PR 08-AUG-2003; 2003US-0494597P.
 PR 11-AUG-2003; 2003US-0506341P.
 PR 26-SEP-2003; 2003US-0510246P.
 PR 09-OCT-2003; 2003US-0510318P.
 PR 10-OCT-2003; 2003US-0518453P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 XX (ALNY-) ALNYLAM PHARM.
 XX
 PA Manoharan M, Bumcrot D;
 XX
 XX WPI; 2004-677362/66.
 DR
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 XX Example 5; SEQ ID NO 6760; 378pp; English.
 XX
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 827
 ADR82258/c
 ID ADR82258 standard; DNA; 19 BP.
 XX
 AC ADR82258;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE Hepatitis C virus (HCV) oligonucleotide seqid 6757.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO2004080406-A2.
 XX
 PD 23-SEP-2004.
 XX
 PF 08-MAR-2004; 2004WO-US007070.
 XX
 PR 07-MAR-2003; 2003US-0452682P.
 PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465902P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 (ALNY-) ALNYLAM PHARM.
 XX
 PA Manoharan M, Bumcrot D;
 XX
 PI WPI; 2004-677362/66.
 XX
 DR Interference RNA agent useful for treating dyslipidaemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 XX Example 5; SEQ ID NO 6757; 378pp; English.
 PS
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 828
 ADR82256/c
 ID ADR82256 standard; DNA; 19 BP.
 XX
 AC ADR82256;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE Hepatitis C virus (HCV) oligonucleotide seqid 6755.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO2004080406-A2.
 XX
 PD 23-SEP-2004.
 XX
 PF 08-MAR-2004; 2004WO-US007070.
 XX
 PR 07-MAR-2003; 2003US-0452682P.
 PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465902P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 (ALNY-) ALNYLAM PHARM.
 XX
 PA Manoharan M, Bumcrot D;
 XX
 PI WPI; 2004-677362/66.
 XX
 DR Interference RNA agent useful for treating dyslipidaemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 XX Example 5; SEQ ID NO 6757; 378pp; English.
 PS
 XX

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PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 6755; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
XX be used to control HCV gene expression.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAA 1
RESULT 829
ID ADR82259/C
XX ADR82259 standard; DNA; 19 BP.
XX
AC ADR82259;
DT 16-DEC-2004 (first entry)
XX
XX Hepatitis C virus (HCV) oligonucleotide seqid 6758.
DE
XX

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KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
XX
OS Hepatitis C virus.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 10-OCT-2003; 2003US-0510246P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 6758; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
XX be used to control HCV gene expression.
XX

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CC be used to control HCV gene expression.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 830
ADT85243/c
ID ADT85243 standard; DNA; 19 BP.
XX
AC ADT85243;
XX
DT 13-JAN-2005 (first entry)
XX
DE Hepatitis C virus (HCV) inhibition associated DNA seqid 5285.
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW coronary artery disease; statin-resistant hypercholesterolaemia;
KW hepatic glucose production; coronary heart disease; atherosclerosis;
KW type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW antisense inhibition; ss.
XX
OS Hepatitis C virus.
XX
PN WO2004091515-A2.
XX
PD 28-OCT-2004.
XX
PF 09-APR-2004; 2004WO-US011255.
XX
PR 09-APR-2003; 2003US-0462097P.
PR 10-APR-2003; 2003US-0461915P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PR 08-MAR-2004; 2004WO-US007070.
PR 03-APR-2004; 2004WO-US010586.
XX
PA (ALNY-) ALNYLAM PHARM INC.
XX
PI Manoharan M, Elbaashir S, Harborth J;
XX
XX
XX WIPI; 2004-766693/75.
XX
XX New interference RNA agent comprising sense sequence and antisense
XX sequence having cholesterol moieties, useful for reducing apoB-100 levels
XX or glucose-6-phosphatase levels.
XX
XX Example 4; SEQ ID NO 5285; 324pp; English.
XX
XX The invention describes an interference RNA (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence
XX comprises one or more cholesterol moieties, and the antisense sequence
XX targets a human gene sequence. The following are disclosed: a

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CC pharmaceutical composition comprising (I); and a device for administering
CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC any one of sequences as given in the specification. (I) comprises a
CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC (I) further comprises a second cholesterol moiety. The second cholesterol
CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC duplex region of (I) is 19 nucleotides in length. The subject is
CC suffering from a disorder having elevated or otherwise unwanted
CC expression of apo-B-100, elevated or otherwise unwanted levels of
CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC combined hyperlipidaemia or acquired hyperlipidaemia),
CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC artery disease, coronary heart disease and atherosclerosis, preferably
CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC to inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorders e.g., type-2 diabetes or glitaxzone-resistant diabetes.
CC (I) has endonuclease or exonuclease resistance. This sequence represents
CC a human hepatitis C virus polynucleotide associated with the inhibition
CC of HCV in human liver cells.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 831
ADT85248/c
ID ADT85248 standard; DNA; 19 BP.
XX
AC ADT85248;
XX
DT 13-JAN-2005 (first entry)
XX
DE Hepatitis C virus (HCV) inhibition associated DNA seqid 5290.
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW coronary artery disease; statin-resistant hypercholesterolaemia;
KW hepatic glucose production; coronary heart disease; atherosclerosis;
KW type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW antisense inhibition; ss.
XX
OS Hepatitis C virus.
XX
PN WO2004091515-A2.
XX
PD 28-OCT-2004.
XX
PF 09-APR-2004; 2004WO-US011255.
XX
PR 09-APR-2003; 2003US-0462097P.
PR 10-APR-2003; 2003US-0461915P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.

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RESULT 833
ADT85246/c
ID   ADT85246 standard; DNA; 19 BP.
XX
XX
AC   ADT85246;
XX
XX
DT   13-JAN-2005 (first entry)
XX
DE   Hepatitis C virus (HCV) inhibition associated DNA seqid 5288.
XX
XX   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   interference RNA; iRNA; cholesterol moiety; apob; glucose-6-phosphatase;
KW   lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW   familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW   hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW   coronary artery disease; coronary heart disease; atherosclerosis;
KW   hepatic glucose production; glucose-metabolism-related disorder;
KW   type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW   antisense inhibition; ss.
XX
XX   Hepatitis C virus.
XX
XX   WO2004091515-A2.
XX
XX   28-OCT-2004.
XX
XX   09-APR-2004; 2004WO-US011255.
XX
XX   09-APR-2003; 2003US-0462097P.
XX   10-APR-2003; 2003US-0461915P.
XX   14-APR-2003; 2003US-0462894P.
XX   17-APR-2003; 2003US-0463772P.
XX   25-APR-2003; 2003US-0465665P.
XX   09-MAY-2003; 2003US-0465802P.
XX   08-AUG-2003; 2003US-0493986P.
XX   11-AUG-2003; 2003US-0494597P.
XX   26-SEP-2003; 2003US-0506341P.
XX   09-OCT-2003; 2003US-0510346P.
XX   10-OCT-2003; 2003US-0510318P.
XX   07-NOV-2003; 2003US-0518453P.
XX   08-MAR-2004; 2004WO-US007070.
XX   05-APR-2004; 2004WO-US010586.
XX
XX   (ALNY-) ALNYLAM PHARM INC.
XX
XX   Manoharan M, Elbashir S, Harborth J;
XX
XX   WPI; 2004-766693/75.
XX
XX   New interference RNA agent comprising sense sequence and antisense
XX   sequence having cholesterol moieties, useful for reducing apob-100 levels
XX   or glucose-6-phosphatase levels.
XX
XX   Example 4; SEQ ID NO 5288; 324pp; English.
XX
XX   The invention describes an interference RNA (iRNA) agent (I) comprising a
XX   sense sequence and an antisense sequence, where the sense sequence
XX   comprises one or more cholesterol moieties, and the antisense sequence
XX   targets a human gene sequence. The following are disclosed: a
XX   pharmaceutical composition comprising (I); and a device for administering
XX   (I) into a patient. (I) is useful for reducing apob-100 levels or glucose
XX   -6-phosphatase levels in a subject. (I) targets a sequence identical to
XX   any one of sequences as given in the specification. (I) comprises a
XX   cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
XX   (I) further comprises a second cholesterol moiety. The second cholesterol
XX   moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
XX   duplex region of (I) is 19 nucleotides in length. The subject is
XX   suffering from a disorder having elevated or otherwise unwanted
XX   expression of apo-B-100, elevated or otherwise unwanted levels of
XX   cholesterol, and/or dysregulation of lipid metabolism. The disorder is
XX   chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
XX   combined hyperlipidaemia or acquired hyperlipidaemia),

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CC   hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC   artery disease, coronary heart disease and atherosclerosis, preferably
CC   statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC   to inhibit hepatic glucose production or for treating glucose-metabolism-
CC   related disorders e.g., type-2 diabetes or glitaxzone-resistant diabetes.
CC   (I) has endonuclease or exonuclease resistance. This sequence represents
CC   a human hepatitis C virus polynucleotide associated with the inhibition
CC   of HCV in human liver cells.
XX
XX   Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
    QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
    Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 834
ADT85245/c
ID   ADT85245 standard; DNA; 19 BP.
XX
XX   AC   ADT85245;
XX
XX   DT   13-JAN-2005 (first entry)
XX
XX   Hepatitis C virus (HCV) inhibition associated DNA seqid 5287.
XX
XX   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   interference RNA; iRNA; cholesterol moiety; apob; glucose-6-phosphatase;
KW   lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW   familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW   hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW   coronary artery disease; coronary heart disease; atherosclerosis;
KW   hepatic glucose production; glucose-metabolism-related disorder;
KW   type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW   antisense inhibition; ss.
XX
XX   Hepatitis C virus.
XX
XX   WO2004091515-A2.
XX
XX   28-OCT-2004.
XX
XX   09-APR-2004; 2004WO-US011255.
XX
XX   09-APR-2003; 2003US-0462097P.
XX   10-APR-2003; 2003US-0461915P.
XX   14-APR-2003; 2003US-0462894P.
XX   17-APR-2003; 2003US-0463772P.
XX   25-APR-2003; 2003US-0465665P.
XX   09-MAY-2003; 2003US-0465802P.
XX   08-AUG-2003; 2003US-0493986P.
XX   11-AUG-2003; 2003US-0494597P.
XX   26-SEP-2003; 2003US-0506341P.
XX   09-OCT-2003; 2003US-0510346P.
XX   10-OCT-2003; 2003US-0510318P.
XX   07-NOV-2003; 2003US-0518453P.
XX   08-MAR-2004; 2004WO-US007070.
XX   05-APR-2004; 2004WO-US010586.
XX
XX   (ALNY-) ALNYLAM PHARM INC.
XX
XX   Manoharan M, Elbashir S, Harborth J;
XX
XX   WPI; 2004-766693/75.
XX
XX   New interference RNA agent comprising sense sequence and antisense
XX   sequence having cholesterol moieties, useful for reducing apob-100 levels
XX   or glucose-6-phosphatase levels.

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XX Example 4; SEQ ID NO 5287; 324pp; English.
XX
XX The invention describes an interference RNA (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence
CC comprises one or more cholesterol moieties, and the antisense sequence
CC targets a human gene sequence. The following are disclosed: a
CC pharmaceutical composition comprising (I); and a device for administering
CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC (I) further comprises a second cholesterol moiety. The second cholesterol
CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC duplex region of (I) is 19 nucleotides in length. The subject is
CC suffering from a disorder having elevated or otherwise unwanted levels of
CC expression of apo-B-100, elevated or otherwise unwanted levels of
CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC combined hyperlipidaemia or acquired hyperlipidaemia),
CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC artery disease, coronary heart disease and atherosclerosis, preferably
CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC to inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
CC (I) has endonuclease or exonuclease resistance. This sequence represents
CC a human hepatitis C virus polynucleotide associated with the inhibition
CC of HCV in human liver cells.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
XX |||||||||||||||||||
XX Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 835
XX ADT85247/C
XX ID ADT85247 standard; DNA; 19 BP.
XX
XX AC ADT85247;
XX
XX DT 13-JAN-2005 (first entry)
XX
XX DE Hepatitis C virus (HCV) inhibition associated DNA seqid 5289.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
XX lipid metabolism; cholesterol imbalance; dyslipidaemia;
XX familial combined hyperlipidaemia; acquired hyperlipidaemia;
XX hypercholesterolaemia; statin-resistant hypercholesterolaemia;
XX coronary artery disease; coronary heart disease; atherosclerosis;
XX hepatic glucose production; glucose-metabolism-related disorder;
XX type-2 diabetes; glitazone-resistant diabetes; HCV; hepatitis C virus;
XX antisense inhibition; ss.
XX
XX Hepatitis C virus.
XX
XX WO2004091515-A2.
XX
XX 28-OCT-2004.
XX
XX 09-APR-2004; 2004WO-US011255.
XX
XX 09-APR-2003; 2003US-0462097P.
XX 10-APR-2003; 2003US-0461915P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.

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PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PR 08-MAR-2004; 2004WO-US007070.
PR 05-APR-2004; 2004WO-US010586.
XX
XX (ALNY-) ALNYLAM PHARM INC.
XX
XX Manoharan M, Elbashir S, Harborth J;
XX WPI; 2004-766693/75.
XX
XX New interference RNA agent comprising sense sequence and antisense
XX sequence having cholesterol moieties, useful for reducing apoB-100 levels
XX or glucose-6-phosphatase levels.
XX
XX Example 4; SEQ ID NO 5289; 324pp; English.
XX
XX The invention describes an interference RNA (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence
XX comprises one or more cholesterol moieties, and the antisense sequence
XX targets a human gene sequence. The following are disclosed: a
XX pharmaceutical composition comprising (I); and a device for administering
XX (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
XX -6-phosphatase levels in a subject. (I) targets a sequence identical to
XX any one of sequences as given in the specification. (I) comprises a
XX cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
XX (I) further comprises a second cholesterol moiety. The second cholesterol
XX moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
XX duplex region of (I) is 19 nucleotides in length. The subject is
XX suffering from a disorder having elevated or otherwise unwanted levels of
XX expression of apo-B-100, elevated or otherwise unwanted levels of
XX cholesterol, and/or dysregulation of lipid metabolism. The disorder is
XX chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
XX combined hyperlipidaemia or acquired hyperlipidaemia),
XX hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
XX artery disease, coronary heart disease and atherosclerosis, preferably
XX statin-resistant hypercholesterolaemia. (I) is administered to a subject
XX to inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
XX (I) has endonuclease or exonuclease resistance. This sequence represents
XX a human hepatitis C virus polynucleotide associated with the inhibition
XX of HCV in human liver cells.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
XX |||||||||||||||||||
XX Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 836
XX AEB28528/C
XX ID AEB28528 standard; DNA; 19 BP.
XX
XX AC AEB28528;
XX
XX DT 22-SEP-2005 (first entry)
XX
XX Antisense oligonucleotide with modified linkages, seq id 3.
XX
XX Antisense oligonucleotide; gene therapy; protected oligonucleotide;
XX diagnostic; therapeutic; prodrug activation; ss.
XX

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OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2-(pivaloylthio)ethyl phosphotriester
FT internucleotide linkages between nucleotides 1-2,2-3,3-
FT 4,16-17,17-18,18-19 OR 2-(pivaloylthio)ethyl
FT phosphotriester internucleotide linkages between 1-2,2-3,3
FT -4,4-5,15-16,16-17,17-18,18-19 where nucleotides 1-4 and
FT 15-18 are 2'-O-(2-methoxyethyl)thymidines"
XX
PN US6919437-B1.
XX
PD 19-JUL-2005.
XX
PP 10-JUN-1999; 99US-00329416..
XX
PP 11-JUN-1998; 98US-00095822..
XX
PP (ISIS-) ISIS PHARM INC.
XX
PP Manoharan M, Guzaev A;
XX
PP WPI; 2005-519331/53.
XX
XX
XX New nucleoside/oligonucleotides modified at 2' position by linker-bound
XX support including nucleosides containing bioreversible phosphate blocking
XX linkages, useful as diagnostic, therapeutic and research reagents.
XX
XX Example 2; SEQ ID NO 3; 20pp; English.
XX
XX The invention relates to nucleosides/oligonucleotides (I) modified at 2'
XX position by linker-bound support including nucleosides containing
XX bioreversible phosphate blocking linkages. (I) are useful in diagnostics,
XX therapeutics and as research reagents and kits. The method is useful in
XX the preparation of antisense oligonucleotides that can be directed
XX against a target messenger RNA sequence or alternatively against a target
XX DNA sequence, or hybridize to the nucleic acid to which they are
XX complementary. They are useful for treating organisms having a disease
XX characterized by the undesired production of a protein. (I) have enhanced
XX chemical and biophysical properties for cellular membrane penetration
XX i.e. they are capable of improving cellular lipid bilayers penetrating
XX potential as well as resistance to exonuclease and endonuclease
XX degradation in vivo. (I) mitigate potential problems such as very short
XX biological half-lives due to degradation by nucleases, inherent negative
XX charge and hydrophilic nature associated with the therapeutic use of
XX oligonucleotides of natural composition. The bioreversible protecting
XX groups lend nuclease resistance to the oligonucleotides and are removed
XX in a cell, in the cell cytosol or in vitro in cytosol extract by
XX endogenous enzymes. The current sequence represents an antisense
XX oligonucleotide that illustrates the method of the invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
XX |||||
XX Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 837
XX AEC90953
XX ID AEC90953 standard; RNA; 19 BP.
XX
XX AC AEC90953;
XX
XX 17-NOV-2005 (first entry)
XX

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DE STAT-3 siRNA antisense strand, SEQ ID 551.
XX
XX Signal-transducer and activator of transcription-3; RNA interference;
XX gene silencing; cytostatic; antiproliferative; dermatological;
XX antiinflammatory; gastrointestinal-Gen.; cancer; inflammation; psoriasis;
XX eczema; dermatitis; Crohn's disease; inflammatory bowel disease; siRNA;
XX short interfering RNA; ss.
XX
XX Synthetic.
XX
XX US2005196781-A1.
XX
XX 08-SEP-2005.
XX
XX 15-DEC-2004; 2004US-00014373.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 20-JUL-2001; 2001US-0306883P.
XX 13-AUG-2001; 2001US-0311865P.
XX 20-FEB-2002; 2002US-0358580P.
XX 06-MAR-2002; 2002US-0362018P.
XX 11-MAR-2002; 2002US-0363124P.
XX 17-MAY-2002; 2002US-00151116.
XX 06-JUN-2002; 2002WO-US015876.
XX 22-JUL-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX 20-FEB-2003; 2003WO-US005028.
XX 20-FEB-2003; 2003WO-US005346.
XX 30-APR-2003; 2003US-00427160.
XX 23-MAY-2003; 2003US-00444853.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Robin H, Mcswiggen J;
XX WPI; 2005-604649/62.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
XX acid molecule that directs cleavage of STAT3 RNA through RNA
XX interference, useful for treating cancer and inflammatory diseases e.g.
XX psoriasis in subject or organism.
XX
XX Example 3; SEQ ID NO 551; 266pp; English.
XX
XX The invention relates to a novel chemically synthesized double stranded
XX short interfering nucleic acid molecule that directs cleavage of a signal
XX transducer and activator of transcription 3 (STAT3) RNA by RNA
XX interference. The invention further includes a composition comprising the
XX short interfering nucleic acid in a carrier or diluent. The short
XX interfering nucleic acid has cytostatic, antiproliferative, dermatological,
XX antiinflammatory, and gastrointestinal-Gen. activities. The short
XX interfering nucleic acid or its composition is useful for treating,
XX preventing, inhibiting, or reducing cancer, proliferative, and/or
XX inflammatory diseases, disorders, or conditions in a subject or organism,
XX such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
XX bowel disease, and for any other disease, trait, or condition that is
XX related to or will respond to the levels of STAT3 in a cell or tissue,
XX alone or in combination with other treatments or therapies. This oligo
XX sequence represents a STAT-3 siRNA strand of the invention.
XX

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SQ Sequence 19 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 1 AAAAAAAAAAAAAAAAAAAAAA 19
RESULT 838
AEC90676/c
ID AEC90676 standard; RNA; 19 BP.
XX AC AEC90676;
XX DT 17-NOV-2005 (first entry)
XX DE STAT-3 siRNA target/sense strand, SEQ ID 274.
XX KW Signal-transducer and activator of transcription-3; RNA interference;
KW Gene silencing; cytostatic; antiproliferative; dermatological;
KW anti-inflammatory; gastrointestinal-gen.; cancer; inflammation; psoriasis;
KW eczema; dermatitis; Crohn's disease; inflammatory bowel disease; siRNA;
KW short interfering RNA; ss.
XX OS Synthetic.
XX PN US2005196781-A1.
XX PD 08-SEP-2005.
XX PF 15-DEC-2004; 2004US-00014373.
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-JUL-2001; 2001US-0306883P.
XX PR 13-AUG-2001; 2001US-0311865P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 17-MAY-2002; 2002US-00151116.
XX PR 17-MAY-2002; 2002US-0015876P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 22-JUL-2002; 2002US-00201394.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409233P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003US-0005028.
XX PR 20-FEB-2003; 2003US-0005346.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-00444853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004US-0013456.
XX PR 24-MAY-2004; 2004US-0016390.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Robin H, Mcswiggen J;
XX PF WPI; 2005-604649/62.
XX PR Novel chemically synthesized double stranded short interfering nucleic
XX acid molecule that directs cleavage of STAT3 RNA through RNA
XX interference, useful for treating cancer and inflammatory diseases e.g.
XX psoriasis in subject or organism.
XX PT
```

```
XX PS Example 3; SEQ ID NO 274; 266pp; English.
XX CC The invention relates to a novel chemically synthesized double stranded
XX short interfering nucleic acid molecule that directs cleavage of a signal
XX transducer and activator of transcription 3 (STAT3) RNA by RNA
XX interference. The invention further includes a composition comprising the
XX short interfering nucleic acid in a carrier or diluent. The short
XX interfering nucleic acid has cytostatic, antiproliferative, dermatological,
XX anti-inflammatory, and gastrointestinal-gen. activities. The short
XX interfering nucleic acid or its composition is useful for treating,
XX preventing, inhibiting, or reducing cancer, proliferative, and/or
XX inflammatory diseases, disorders, or conditions in a subject or organism,
XX such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
XX bowel disease, and for any other disease, trait, or condition that is
XX related to or will respond to the levels of STAT3 in a cell or tissue,
XX alone or in combination with other treatments or therapies. This oligo
XX sequence represents a STAT-3 siRNA strand of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 0 T; 19 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 839
AECF76001
ID AECF76001 standard; RNA; 19 BP.
XX AC AECF76001;
XX DT 06-APR-2006 (first entry)
XX DE Human NOGO receptor target sequence/siRNA sense strand, SEQ:551.
XX KW RNA interference; gene silencing; short interfering RNA; siRNA;
KW nervous system injury; spinal cord injury; neuroprotective; vulnery;
KW cerebrovascular ischemia; cerebroprotective; multiple sclerosis;
KW muscular dystrophy; muscular-gen.; neuropathy; motor neuron disease;
KW Cns-gen.; ataxia; Parkinson's disease; antiparkinsonian;
KW Huntington's chorea; anticonvulsant; nootropic; dementia;
KW Creutzfeldt Jakob disease; Alzheimers disease; NOGO receptor;
KW reticulon 4 receptor; RTN4R; ss.
XX OS Homo sapiens.
XX PN US2005261212-A1.
XX PD 24-NOV-2005.
XX PF 26-JUL-2002; 2002US-00206693.
XX PR 11-FEB-2000; 2000US-0181797P.
XX PR 03-FEB-2001; 2001US-00780533.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 03-APR-2002; 2002US-0010512.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Mcswiggen JA;
XX PF WPI; 2006-190836/20.
XX PR New chemically modified double stranded short interfering nucleic acid
XX (siRNA) molecule that directs cleavage of a NOGO receptor (NOGOR) RNA via
XX PT
```

PT RNA interference (RNAi), useful for modulating gene expression.
XX
PS Disclosure; SEQ ID NO 551; 171pp; English.
XX
CC The invention relates to chemically synthesized short interfering nucleic
CC acids (siRNAs) which downregulate expression of a NOGO receptor gene by
CC RNA interference. The siRNAs may or may not comprise ribonucleotides, can
CC contain deoxyribonucleotides, can be chemically modified and may be
CC double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The invention also relates to pharmaceutical
CC compositions comprising an siRNA targeted to a NOGO receptor mRNA. It
CC further discloses siRNAs targeted to a NOGO receptor gene, siRNAs targeted
CC to a NOGO gene itself, and expression vectors and host cells comprising
CC an siRNA of the invention. In particular, the invention discloses siRNAs
CC (AEF75903-AEF76100 and AEF76101-AEF76112) targeted to the human NOGO
CC receptor gene of GenBank accession number BC011787, and siRNAs (AEF75451-
CC AEF75902) targeted to the human NOGO-A (K1AA0886) gene of DDBJ accession
CC number AB020693. The siRNAs are used to modulate expression of NOGO
CC receptor or NOGO genes in cells, tissue explants or organisms (e.g., by
CC ex vivo gene therapy), or in grafts and transplants for the treatment of
CC a variety of neurodegenerative conditions such as central nervous system
CC (CNS) injury (e.g., spinal cord injury or stroke), multiple sclerosis
CC (MS), muscular dystrophy, chemotherapy-induced neuropathy, amyotrophic
CC lateral sclerosis (ALS), ataxia, Parkinson's disease, Huntington's
CC disease, dementia, Creutzfeldt-Jakob disease and especially Alzheimer's
CC disease. The siRNAs may also be used in drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC sense strand of a human NOGO receptor-targeted double-stranded siRNA,
CC which is identical to the NOGO receptor transcript target sequence.
XX
SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 7.7e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
DB 1 UAAAAAAAAAAAAAAAAAAAAA 19

RESULT 840
AEF76100/c
ID AEF76100 standard; RNA; 19 BP.
AC AEF76100;
XX
XX
XX 06-APR-2006 (first entry)
DE Human NOGO receptor siRNA antisense strand, SEQ:650.
XX
XX RNA interference; gene silencing; short interfering RNA; siRNA;
KW nervous system injury; spinal cord injury; neuroprotective; vulnery;
KW cerebrovascular ischemia; cerebroprotective; multiple sclerosis;
KW muscular dystrophy; muscular-gen.; neuropathy; motor neurone disease;
KW CNS-gen.; ataxia; Parkinson's disease; antiparkinsonian;
KW Huntingtons chorea; anticonvulsant; nootropic; dementia;
KW Creutzfeldt Jakob disease; Alzheimers disease; NOGO receptor;
KW reticulon 4 receptor; RTN4R; ss.
XX
XX Homo sapiens.
OS
XX US2005261212-A1.
PN
XX
XX 24-NOV-2005.
PD
XX
XX 26-JUL-2002; 2002US-00206693.
PF
XX

PR 11-FEB-2000; 2000US-0181797P.
PR 09-FEB-2001; 2001US-00780533.
PR 05-APR-2001; 2001US-00827395.
PR 20-FEB-2002; 2002US-038580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 06-JUN-2002; 2002US-0386782P.
XX
XX (MCSW/) MCSWIGGEN J A.
PA
XX Mcswiggen JA;
PI
XX WPI; 2006-190836/20.
DR
XX
XX New chemically modified double stranded short interfering nucleic acid
XX (siRNA) molecule that directs cleavage of a NOGO receptor (NOGOR) RNA via
XX RNA interference (RNAi), useful for modulating gene expression.
PS Disclosure; SEQ ID NO 650; 171pp; English.
XX
CC The invention relates to chemically synthesized short interfering nucleic
CC acids (siRNAs) which downregulate expression of a NOGO receptor gene by
CC RNA interference. The siRNAs may or may not comprise ribonucleotides, can
CC contain deoxyribonucleotides, can be chemically modified and may be
CC double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The invention also relates to pharmaceutical
CC compositions comprising an siRNA targeted to a NOGO receptor mRNA. It
CC further discloses siRNAs targeted to a NOGO receptor gene, siRNAs comprising
CC to a NOGO gene itself, and expression vectors and host cells comprising
CC an siRNA of the invention. In particular, the invention discloses siRNAs
CC (AEF75903-AEF76100 and AEF76101-AEF76112) targeted to the human NOGO
CC receptor gene of GenBank accession number BC011787, and siRNAs (AEF75451-
CC AEF75902) targeted to the human NOGO-A (K1AA0886) gene of DDBJ accession
CC number AB020693. The siRNAs are used to modulate expression of NOGO
CC receptor or NOGO genes in cells, tissue explants or organisms (e.g., by
CC ex vivo gene therapy), or in grafts and transplants for the treatment of
CC a variety of neurodegenerative conditions such as central nervous system
CC (CNS) injury (e.g., spinal cord injury or stroke), multiple sclerosis
CC (MS), muscular dystrophy, chemotherapy-induced neuropathy, amyotrophic
CC lateral sclerosis (ALS), ataxia, Parkinson's disease, Huntington's
CC disease, dementia, Creutzfeldt-Jakob disease and especially Alzheimer's
CC disease. The siRNAs may also be used in drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC antisense strand of a human NOGO receptor-targeted double-stranded siRNA.
XX
SQ Sequence 19 BP; 1 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
DB 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 841
AAQ49436/c
ID AAQ49436 standard; cDNA; 20 BP.
AC AAQ49436;
XX
XX 25-MAR-2003 (revised)
DT 27-APR-1994 (first entry)
XX
XX Cytochrome P450 sequence amplification PCR primer polyT.
DE
XX Transgenic plants; altered petal colour; polymerase chain reaction; ss.

```

XX Synthetic.
XX WO9320206-A1.
XX 14-OCT-1993.
XX 25-MAR-1993; 93WO-AU000127.
XX 27-MAR-1992; 92AU-00001538.
XX 07-JAN-1993; 93AU-00006698.
XX (ITFL-) INT FLOWER DEV PTY LTD.
XX Holton TA, Cornish EC, Tanaka Y;
XX WPI; 1993-336914/42.
XX Nucleic acid isolate encoding flavonoid-3'-hydroxylase - is used to
XX create transgenic plants with altered petal colour.
XX Disclosure; Page 25; 86pp; English.
XX The sequence is that of a PCR primer which was used in polymerase chain
XX reactions for the amplification of cloned cytochrome P450 sequences.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 7.9e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAACAAAAA 2725
Db 19 CTAACAAAAA 1

RESULT 842
AAQ75575/c
ID AAQ75575 standard; DNA; 20 BP.
AC AAQ75575;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 7.9e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAACAAAAA 2725
Db 19 CTAACAAAAA 1

RESULT 844
AAQ75576/c
ID AAQ75576 standard; DNA; 20 BP.
XX

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 7.9e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAACAAAAA 2725
Db 19 CTAACAAAAA 1

RESULT 843
AAQ75578/c
ID AAQ75578 standard; DNA; 20 BP.
XX AAQ75578;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 7.9e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAACAAAAA 2725
Db 19 CTAACAAAAA 1

RESULT 844
AAQ75576/c
ID AAQ75576 standard; DNA; 20 BP.
XX

```

```

AC AAQ75576;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAAAGAAAAA 2725
Db 19 CTAAGAAAAAAGAAAAA 1

RESULT 845
AAS05714
ID AAS05714 standard; DNA; 20 BP.
XX
XX AAS05714;
AC
XX
XX 09-SEP-2004 (revised)
DT
XX 07-SEP-2001 (first entry)
XX
XX Aminopurine substituted region of an RP-TFO.
XX
XX reverse phase triplex forming oligonucleotide; RP-TFO;
XX protected nucleic acid sequence; PNAS; single nucleotide polymorphism;
XX SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 3
FT /*tag= b
FT /mod_base= OTHER
FT

/modified_base 5 /note= "A is aminopurine substituted"
FT
FT /*tag= c
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 7
FT /*tag= d
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 9
FT /*tag= e
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 11
FT /*tag= f
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 13
FT /*tag= g
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 15
FT /*tag= h
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 16
FT /*tag= i
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 17
FT /*tag= j
FT /mod_base= OTHER
FT /note= "Other= Hypoxanthine or Inosine"
FT modified_base 18
FT /*tag= k
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
FT modified_base 20
FT /*tag= l
FT /mod_base= OTHER
FT /note= "A is aminopurine substituted"
XX
XX WO200132929-A1.
XX
XX 10-MAY-2001.
XX
XX 03-NOV-2000; 2000WO-US030534.
XX
XX 03-NOV-1999; 99US-0163356P.
XX
XX 03-NOV-1999; 99US-0163416P.
XX
XX 21-DEC-1999; 99US-0173348P.
XX
XX 07-JUL-2000; 2000US-0216579P.
XX
XX (CYGE-) CYGENE INC.
XX (OSTE/) OSTE C C.
XX
XX Oste CC, Ramberg ER;
XX
XX WPI; 2001-343488/36.
XX
XX Analyzing target nucleic acid sequences, useful for population genetics,
XX drug development and diagnosing cancer, comprises hybridizing triple
XX forming oligonucleotide and probe to target sequence.
XX
XX Example 2; Page 66; 141pp; English.
XX
XX The sequence is a second reverse phase triplex forming oligonucleotide,
XX RP-TFO (3' to the SNP) used to analyse Factor V Leiden SNP using the
XX method of the invention. The invention relates to analysing target
XX nucleic acid sequences comprising restricting isolated DNA, hybridising
XX at least one triplex forming oligonucleotide (TFO), adding a 3' to 5',
XX exonuclease to form a protected nucleic acid sequence (PNAS) tail
XX structure, hybridising the captured structure with a single nucleotide
XX

```

CC polymorphisms (SNP) identification probe and determining the SNP score.
 CC The methods can be used for analysing target nucleic acid sequences,
 CC especially genomic DNA sequences, to determine if they contain SNPs or
 CC short tandem repeats (STRs). The methods can be used to detect SNPs for
 CC use in population genetics, drug development, forensics, cancer, genetic
 CC disease research, genomic analysis, diagnostics and therapeutics in
 CC humans, plants and animals
 CC
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||
 RESULT 846
 AAS05715/C
 ID AAS05715 standard; DNA; 20 BP.
 XX
 AC AAS05715;
 XX
 DT 09-SEP-2004 (revised)
 DT 07-SEP-2001 (first entry)
 XX
 XX 8-aminopurine substituted region of an RP-TFO.
 XX
 KW reverse phase triplex forming oligonucleotide; RP-TFO;
 KW protected nucleic acid sequence; PNAS; single nucleotide polymorphism;
 KW SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 17
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Other= Hypoxanthine or Inosine"
 XX
 PN WO200132929-A1.
 XX
 XX 10-MAY-2001.
 XX
 PF 03-NOV-2000; 2000WO-US030534.
 XX
 PR 03-NOV-1999; 99US-0163356P.
 PR 03-NOV-1999; 99US-0163416P.
 PR 21-DEC-1999; 99US-0171348P.
 PR 07-JUL-2000; 2000US-0216579P.
 XX
 XX (CYGE-) CYGENE INC.
 PA (OSTE/) OSTE C C.
 XX
 XX Oste CC, Ramberg ER;
 XX
 XX WPI; 2001-343488/36.
 XX
 XX Analyzing target nucleic acid sequences, useful for population genetics,
 PT drug development and diagnosing cancer, comprises hybridizing triple
 PT forming oligonucleotide and probe to target sequence.
 XX
 PS Example 2; Page 66; 141pp; English.
 XX
 CC The sequence is a second reverse phase triplex forming oligonucleotide,
 CC RP-TFO (3' to the SNP) used to analyse Factor V Leiden SNP using the
 CC method of the invention. The invention relates to analysing target
 CC nucleic acid sequences comprising restricting isolated DNA, hybridising
 CC at least one triplex forming oligonucleotide (TFO), adding a 3' to 5'

CC exonuclease to form a protected nucleic acid sequence (PNAS) tail
 CC structure, hybridising the captured structure with a single nucleotide
 CC polymorphisms (SNP) identification probe and determining the SNP score.
 CC The methods can be used for analysing target nucleic acid sequences, or
 CC especially genomic DNA sequences, to determine if they contain SNPs or
 CC short tandem repeats (STRs). The methods can be used to detect SNPs for
 CC use in population genetics, drug development, forensics, cancer, genetic
 CC disease research, genomic analysis, diagnostics and therapeutics in
 CC humans, plants and animals
 CC
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||
 RESULT 847
 ABZ88266
 ID ABZ88266 standard; DNA; 20 BP.
 XX
 AC ABZ88266;
 XX
 DT 17-OCT-2003 (first entry)
 DT
 XX Human oligonucleotide sequence.
 DE
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 XX
 XX 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 3508; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 850
 ABZ88618
 ID ABZ88618 standard; DNA; 20 BP.
 XX
 AC ABZ88618;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3860; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytosstatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 2 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 851
 ABZ89678
 ID ABZ89678 standard; DNA; 20 BP.

XX
 AC ABZ89678;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4920; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytosstatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 852

AB287681/C

ID AB287681 standard; DNA; 20 BP.

XX AC AB287681;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

XX ubiquinone.

XX Disclosure; SEQ ID NO 2923; 872bp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

XX first active agent comprising an oligonucleotide antisense to the

XX initiation codon, coding region, 5' or 3' end genomic flanking regions,

XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

XX junctions of genes encoding a polypeptide associated with lung and/or

XX nasal airway dysfunction and a second active agent comprising an

XX antiinflammatory steroid and ubiquinone. A composition of the invention

XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

XX immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 7.9e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 853

AB289677

ID AB289677 standard; DNA; 20 BP.

XX AC AB289677;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

XX ubiquinone.

XX Disclosure; SEQ ID NO 4919; 872bp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

XX first active agent comprising an oligonucleotide antisense to the

XX initiation codon, coding region, 5' or 3' end genomic flanking regions,

XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

XX junctions of genes encoding a polypeptide associated with lung and/or

XX nasal airway dysfunction and a second active agent comprising an

XX antiinflammatory steroid and ubiquinone. A composition of the invention

XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

XX immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 854

ABD24848
 ID ABD24848 standard; DNA; 20 BP.

AC ABD24848;

XX 29-JUL-2004 (first entry)

XX A1092623-derived oligonucleotide SEQ ID 3860.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

PS Claim 15; SEQ ID NO 3860; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

SQ Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 Db 2 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 855

ABD32081/c

ID ABD32081 standard; DNA; 20 BP.

XX ABD32081;

XX 29-JUL-2004 (first entry)

XX Human PDE4C-derived oligonucleotide SEQ ID 14292.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 14292; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
|||||
DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 856
ABD25776
ID ABD25776 standard; DNA; 20 BP.
XX AC ABD25776;
XX AC ABD25776;
XX DT 29-JUL-2004 (first entry)
XX DE A1085559 DNA fragment.
XX XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX OS Homo sapiens.
XX XX WO200285309-A2.
XX PN 31-OCT-2002.
XX PD 23-APR-2002; 2002WO-US013143.
XX PF

XX 24-APR-2001; 2001US-0286036P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.

XX Claim 15; SEQ ID NO 4788; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
|||||
DB 2 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 857
ABD24496
ID ABD24496 standard; DNA; 20 BP.
XX AC ABD24496;
XX AC ABD24496;
XX DT 29-JUL-2004 (first entry)
XX DE A1652901-derived oligonucleotide SEQ ID 3508.
XX XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3508; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytoskeletal activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC the thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2725

Db 2 CTAACAAAAA 20

RESULT 850

ABD23911/c

ID ABD23911 standard; DNA; 20 BP.

XX ABD23911;

XX 29-JUL-2004 (first entry)

XX Human calmodulin 2-derived oligonucleotide SEQ ID 2923.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytoskeletal; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 2923; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytoskeletal activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC the thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 859
ADJ60935/c
ID ADJ60935 standard; DNA; 20 BP.
XX
AC ADJ60935;
XX
DT 06-MAY-2004 (first entry)
XX
DE Oligonucleotide associated to PDE4C #1.
XX
KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2004011613-A2.
XX
PD 05-FEB-2004.
XX
PF 25-JUL-2003; 2003WO-US023509.
XX
PR 29-JUL-2002; 2002US-0399076P.
XX
PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI NYCE JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-203534/19.
XX
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT Initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 1791; 85pp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
```

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
```

RESULT 860
ADK74647/c
ID ADK74647 standard; DNA; 20 BP.
XX
AC ADK74647;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1981.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.

XX WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Roberts SL;
XX
XX WPI; 2004-203785/19.

XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.

XX Claim 4; SEQ ID NO 1981; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
```

RESULT 861
ADK74188/c
ID ADK74188 standard; DNA; 20 BP.
XX
XX ADK74188;


```

XX DT 20-MAY-2004 (first entry)
XX DE
XX KW Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1522.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX OS
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PF New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 1522; 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 862
ADK7414/c
ID ADK7414 standard; DNA; 20 BP.
XX AC ADK7414;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1748.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.

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XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PF New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 1748; 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 20 AAAAAAAAAAAAAAAAAA 2

RESULT 863
ADM14246/c
ID ADM14246 standard; DNA; 20 BP.
XX AC ADM14246;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:433.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FT Key Location/Qualifiers
XX modified_base 1..20

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FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /notes= "phosphorothioate linkages and all cytidine
FT FT residues are 5-methylcytidines"
FT modified_base 1. .5
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
FT modified_base 16. .20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
XX XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 433; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 864
ADO46424/C
ID ADO46424 standard; DNA; 20 BP.
XX
XX ADO46424;
XX
XX 15-JUL-2004 (first entry)
XX
XX Human oligonucleotide #1790.
DE

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XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 1791; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The
XX oligonucleotides are useful for reducing or inhibiting expression of a
XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
XX CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
XX tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
XX useful for preventing or treating a respiratory or lung disease. The
XX respiratory or lung disease is associated with hyper-responsiveness to
XX and/or increased levels of, adenosine and/or levels of adenosine A
XX receptor(s), and/or asthma and/or lung allergies associated with
XX inflammation or an inflammatory disease. The respiratory or lung disease
XX is chosen from airway inflammation, allergy, asthma, impeded respiration,
XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
XX allergic rhinitis, acute respiratory distress syndrome, pulmonary
XX hypertension, lung inflammation, bronchitis, airway obstruction or
XX bronchoconstriction. This sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 865
ADW10727/C
ID ADW10727 standard; DNA; 20 BP.
XX
XX AC ADW10727;
XX
XX DT 07-APR-2005 (first entry)
XX
XX DE Oligo (dT)20 primer.
XX
XX KW Muscular-Gen.; transfection; DNA amplification; gene therapy;
XX growth disorder; musculoskeletal disease; neurological disease;
XX KW muscular dystrophy; DNA expression; ss; RT-PCR; reverse transcriptase;
XX primer.
XX
XX OS Synthetic.
XX
XX PN WO2005003389-A2.
XX
XX PD 13-JAN-2005.
XX
XX PF 25-JUN-2004; 2004WO-GB002787.
XX
XX PR 28-JUN-2003; 2003GB-00015160.
XX
XX PA (UNLO ) ROYAL HOLLOWAY & BEDFORD NEW COLLEGE.
XX
XX PI Dickinson G, Hill V;
XX
XX DR WPI; 2005-101507/11.
XX
XX PT Amplifying an unclonable DNA fragment in vitro, useful for transfecting
XX into a eukaryotic cell, comprises amplifying the fragment by rolling
XX circle amplification.
XX
XX PS Disclosure; SEQ ID NO 3; 72pp; English.
XX
XX CC The invention relates to a method of amplifying an unclonable DNA
XX fragment in vitro for transfection into a eukaryotic cell which comprises
XX amplifying the unclonable DNA fragment by rolling circle amplification
XX (RCA) to produce a tandem series of repeats of the unclonable DNA
XX fragment. The vector is used in therapy, specifically in gene therapy,
XX which may be for muscular dystrophy and for DNA expression studies. The
XX method and kit are useful for amplifying an unclonable DNA fragment in
XX vitro. The present sequence represents an oligo (dT)20 primer.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 866
AEC04052
ID AEC04052 standard; cDNA; 20 BP.
XX
XX AC AEC04052;
XX
XX DT 20-OCT-2005 (first entry)
XX
XX DE Human breast cancer marker cDNA SEQ ID NO 219.
XX

Cytostatic; Gene therapy; diagnosis; breast tumor; endocrine disease;
gynecology and obstetrics; neoplasm; ss; tumor marker.
Homo sapiens.
WO2005072050-A2.
11-AUG-2005.
27-JAN-2005; 2005WO-IB000433.
27-JAN-2004; 2004US-0539128P.
27-JAN-2004; 2004US-0539129P.
22-OCT-2004; 2004US-0620656P.
22-OCT-2004; 2004US-0620853P.
22-OCT-2004; 2004US-0620874P.
22-OCT-2004; 2004US-0620916P.
22-OCT-2004; 2004US-0620917P.
22-OCT-2004; 2004US-0620918P.
22-OCT-2004; 2004US-0620924P.
22-OCT-2004; 2004US-0620974P.
22-OCT-2004; 2004US-0620975P.
22-OCT-2004; 2004US-0621004P.
25-OCT-2004; 2004US-0621131P.
17-NOV-2004; 55US-00043842.
17-NOV-2004; 2004US-0620123P.
17-NOV-2004; 2004US-0628101P.
17-NOV-2004; 2004US-0628111P.
17-NOV-2004; 2004US-0628112P.
17-NOV-2004; 2004US-0628134P.
17-NOV-2004; 2004US-0628145P.
17-NOV-2004; 2004US-0628156P.
17-NOV-2004; 2004US-0628167P.
17-NOV-2004; 2004US-0628178P.
17-NOV-2004; 2004US-0628231P.
17-NOV-2004; 2004US-0628251P.
27-JAN-2005; 2005US-00043842.
(COMP-) COMPUGEN USA INC.
Toporik A, Dahary D, Sorek R, Pollock S, Levine Z, Akiva P;
Diber A, Novik A, Sella-Tavor O, Ayalon-Soifer M, Walach S;
Sameah-Greenwald S, Shemesh R, Keren N, Shklar M;
WPI; 2005-555592/56.
New human nucleic acid and polypeptide sequences useful for screening,
diagnosing or treating breast cancer.
Disclosure; SEQ ID NO 219; 1586pp; English.
The invention relates to an isolated human polynucleotide. The
composition and methods are useful for screening, diagnosing or treating
breast cancer. These may also be used in drug screening or in monitoring
disease progression and/or treatment efficacy of breast cancer. The
present sequence represents a human small inducible cytokine B14
precursor breast cancer marker cDNA.
Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 2 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 867
AED13295
ID AED13295 standard; DNA; 20 BP.
XX

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Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
 |||||
 DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 870
 AAQ75703/c

ID - AAQ75703 standard; DNA; 21 BP.

XX
 AC AAQ75703;

DT 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 by digestion with restriction enzymes.

XX
 PS Disclosure; Page 7; lipp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX
 SQ Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
 |||||
 DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 871

AAQ75705/c

ID AAQ75705 standard; DNA; 21 BP.

XX
 AC AAQ75705;

DT 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 by digestion with restriction enzymes.

XX
 PS Disclosure; Page 7; lipp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX
 SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.7%; Score 19; DB 1; Length 21;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
 |||||
 DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 872

AAQ75706/c

ID AAQ75706 standard; DNA; 21 BP.

XX
 AC AAQ75706;

DT 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 XX aggregate; restriction enzyme; ss.

XX Synthetic.

PN JP06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 by digestion with restriction enzymes.

XX
 PS Disclosure; Page 7; lipp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
 |||||
 Db 19 CTAAGAAAAA 1

RESULT 873

AAQ75717/c

ID AAQ75717 standard; DNA; 21 BP.

XX AC AAQ75717;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
 |||||
 Db 19 CTAAGAAAAA 1

RESULT 874

AAQ75707/c

ID AAQ75707 standard; DNA; 21 BP.

XX AC AAQ75707;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
 |||||
 Db 19 CTAAGAAAAA 1

RESULT 875

AAQ75710/c

ID AAQ75710 standard; DNA; 21 BP.

XX AC AAQ75710;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX AA
 XX DR WPI; 1995-018287/03.
 XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 XX PT by digestion with restriction enzymes.
 XX PS Disclosure; Page 7; 11pp; Japanese.
 XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match .0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2725
 Db 19 CTAAGAAAAA 1
 RESULT 876
 AAQ75709/c
 ID AAQ75709 standard; DNA; 21 BP.
 AC AAQ75709;
 XX 04-AUG-1995 (first entry)
 DT
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW
 XX Synthetic.
 OS
 XX JF06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 XX Disclosure; Page 7; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match .0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2725
 Db 19 CTAAGAAAAA 1
 RESULT 877
 ADK01290/c
 ID ADK01290 standard; DNA; 21 BP.
 XX AC ADK01290;
 XX 06-MAY-2004 (first entry)
 DT
 DE Rat DNA microarray capture oligonucleotide #10.
 XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 KW
 OS Rattus sp.
 XX DE10208794-A1.
 PN
 XX 04-SEP-2003.
 PD
 XX 28-FEB-2002; 2002DE-01008794.
 PF
 XX 28-FEB-2002; 2002DE-01008794.
 PR
 XX (DEGS) DEGUSSA BIOACTIVES GMBH.
 PA
 XX Boekenkamp D, Dieck HT, Hoppe H;
 PI
 XX WPI; 2003-714082/68.
 DR
 XX
 PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 5; 8pp; German.
 PS
 XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bi)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
|||||

Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 878

ADK01281/c

ID ADK01281 standard; DNA; 21 BP.

XX AC ADK01281;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #1.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

XX blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression

XX patterns and screening active agents, uses capture agent with variable

XX and constant regions.

XX Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

XX nucleic acids by isolation and hybridisation of nucleic acid pools, then

XX reading out, where the nucleic acids are selectively bound using capture

XX agents that are (a) immobilised on the surface of a solid matrix and (b)

XX comprise variable and non-variable regions. The capture oligonucleotides

XX have a 5'-invariable anchor region, the complement of which is present at

XX least once in each nucleic acid and a 3'-variable, discriminatory region

XX that comprises all possible combinations of up to 10 nucleotides to allow

XX binding of particular sorts of single stranded nucleic acids. The capture

XX agents are particularly locked nucleic acids (LNA) and the anchor region

XX comprises a sequence of 10-50, particularly 15-25, T residues. The

XX capture oligonucleotides are biotinylated and immobilised on a surface by

XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,

XX metal, resin, gel, crystalline material and/or membrane, having semi-

XX conducting properties and especially in the form of a chip. Its surface

XX is particularly a layer of (bio)molecular filaments and binding of single

XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

XX physical, stimulated by an electrical field or through a molecular sieve.

XX The method is used (i) for analysis of patterns, especially in mucosal,

XX hair root, blood, nerve or germ cells and (ii) for determining the

XX activity of pharmaceuticals and/or nutritional compounds, e.g. food

XX additives or supplements, especially minerals, trace elements, organic

XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and

XX mixtures. The method provides rapid, inexpensive and reproducible

XX representation of differences in pools of nucleic acids from cells. It

CC allows imaging of the complete pattern of all nucleic acid in a cell, and

CC can detect very small differences in the nucleic acid pool. Since the

CC method is based on comparison of nucleic acid pools, not individual

CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
|||||

Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 879

ADK01335/c

ID ADK01335 standard; DNA; 21 BP.

XX AC ADK01335;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #55.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

XX blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression

XX patterns and screening active agents, uses capture agent with variable

XX and constant regions.

XX Example; Page 6; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

XX nucleic acids by isolation and hybridisation of nucleic acid pools, then

XX reading out, where the nucleic acids are selectively bound using capture

XX agents that are (a) immobilised on the surface of a solid matrix and (b)

XX comprise variable and non-variable regions. The capture oligonucleotides

XX have a 5'-invariable anchor region, the complement of which is present at

XX least once in each nucleic acid and a 3'-variable, discriminatory region

XX that comprises all possible combinations of up to 10 nucleotides to allow

XX binding of particular sorts of single stranded nucleic acids. The capture

XX agents are particularly locked nucleic acids (LNA) and the anchor region

XX comprises a sequence of 10-50, particularly 15-25, T residues. The

XX capture oligonucleotides are biotinylated and immobilised on a surface by

XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,

XX metal, resin, gel, crystalline material and/or membrane, having semi-

XX conducting properties and especially in the form of a chip. Its surface

XX is particularly a layer of (bio)molecular filaments and binding of single

XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

XX physical, stimulated by an electrical field or through a molecular sieve.

XX The method is used (i) for analysis of patterns, especially in mucosal,

XX hair root, blood, nerve or germ cells and (ii) for determining the

XX activity of pharmaceuticals and/or nutritional compounds, e.g. food

XX additives or supplements, especially minerals, trace elements, organic

XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and

XX mixtures. The method provides rapid, inexpensive and reproducible

XX representation of differences in pools of nucleic acids from cells. It

CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX
 SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. NO. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 890
 ADK01291/c
 ID ADK01291 standard; DNA; 21 BP.

AC ADK01291;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #11.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX
 PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX

SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. NO. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 881

ADK01295/c

ID ADK01295 standard; DNA; 21 BP.

AC ADK01295;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #15.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX
 PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 882
 ADK01283/c

ID ADK01283 standard; DNA; 21 BP.

XX ADK01283;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #3.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 883
 ADK01339/c

ID ADK01339 standard; DNA; 21 BP.

XX ADK01339;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #59.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 6; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 884

ADK01289/c

ID ADK01289 standard; DNA; 21 BP.

AC ADK01289;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #9.

ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

PS Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726

Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 885

ADK01294/c

ID ADK01294 standard; DNA; 21 BP.

AC ADK01294;

DT 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #14.

ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

```

XX Example; Page 5; 8pp; German.
PS
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2736
Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 886
ADZ98945
ID ADZ98945 standard; RNA; 21 BP.
XX
AC ADZ98945;
XX
XX 28-JUL-2005 (first entry)
XX
DE Human KU70 transcript siRNA sense oligonucleotide siRNA1.
XX
XX protein interaction; short interfering RNA; siRNA; RNA interference;
KW gene silencing; ds.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 20..21
FT /*tag= a
FT /note= "2'-deoxythymine overhang"
XX
XX US2005112118-A1.
XX
XX 26-MAY-2005.
XX
XX 20-OCT-2003; 2003US-00690276.
XX
XX 02-DEC-1999; 99US-0168377P.
XX

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PR 02-DEC-1999; 99US-0168379P.
PR 25-FEB-2000; 2000US-0185056P.
PR 01-DEC-2000; 2000US-00727384.
PR 14-DEC-2000; 2000US-0255063P.
PR 21-DEC-2000; 2000US-0256986P.
PR 04-JAN-2001; 2001US-0259571P.
PR 04-JAN-2001; 2001US-0259572P.
PR 15-MAR-2001; 2001US-0276179P.
PR 19-MAR-2001; 2001US-0277013P.
PR 23-JUL-2001; 2001US-0307233P.
PR 14-DEC-2001; 2001US-00014814.
PR 21-DEC-2001; 2001US-00024599.
PR 04-JAN-2002; 2002US-00035343.
PR 04-JAN-2002; 2002US-00035344.
PR 14-MAR-2002; 2002US-00099944.
PR 18-MAR-2002; 2002US-00100503.
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Cimbora D, Heichman K, Bartel P, Mauck K, Bush A;
PI WPI; 2005-371623/38.
XX
XX Modulating, in a host cell, a protein-protein interaction between first
XX protein, PRAK. (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX -regulated kinase 3) by administering modulating compound.
XX
XX Disclosure; Fig 49; 296pp; English.
XX
XX The invention relates to a method for modulating, in a host cell, a
XX protein-protein interaction between a first protein which is PRAK (P38-
XX regulated/activated protein kinase or MAPKAPK5) and a second protein
XX which is ERK3 (extracellular signal-regulated kinase 3). The method
XX comprises administering to the cell a compound capable of modulating the
XX protein-protein interaction. The method is useful in modulating in a host
XX cell a protein-protein interaction between a first protein which is PRAK
XX and a second protein which is ERK3 for treating inflammation or
XX inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX inflammatory disease, systemic lupus erythematosus, rhinitis,
XX conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX Lyme disease, psoriasis, dermatitis or eczema. The present sequence
XX represents an siRNA (short interfering RNA) oligonucleotide targeting the
XX KU70 transcript, which is used in the exemplification of the present
XX invention.
XX
XX Sequence 21 BP; 7 A; 3 C; 4 G; 2 T; 5 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 8.1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 996 AACGAATTCAGAGCTTGA 1014
Db 1 AACGAATTCAGAGCTTGA 19

RESULT 887
ADZ98947
ID ADZ98947 standard; RNA; 21 BP.
XX
AC ADZ98947;
XX
XX 28-JUL-2005 (first entry)
XX
XX Human KU70 transcript siRNA sense oligonucleotide siRNA2.
XX
XX protein interaction; short interfering RNA; siRNA; RNA interference;
KW gene silencing; ds.
XX
XX Homo sapiens.
OS Synthetic.

```

```
XX FH Key Location/Qualifiers
XX FT misc_feature 20..21
XX FT /*tag= a
XX FT /note= "2'-deoxythymine overhang"
XX PN US2005112118-A1.
XX PD 26-MAY-2005.
XX PF 20-OCT-2003; 2003US-00690276.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168379P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 15-MAR-2001; 2001US-0276179P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX PA (MYRI-) MYRIAD GENETICS INC.
XX PI Cimbroa D, Heichman K, Bartel P, Mauck K, Bush A;
XX DR WPI; 2005-371623/38.
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX FT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX FT -regulated kinase 3) by administering modulating compound.
XX PS Disclosure; Fig 49; 296pp; English.
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
XX CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
XX CC KU70 transcript, which is used in the exemplification of the present
XX CC invention.
XX SQ Sequence 21 BP; 5 A; 2 C; 7 G; 2 T; 5 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 8.1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 2038 GATGAGCGTCATCCTTGAG 2056
||:|||||:|:|:|
Db 1 GAUGAGGCUAUCGUUGAG 19
RESULT 888
ADZ98949
```

ADZ98949 standard; RNA; 21 BP.

ADZ98949;

28-JUL-2005 (first entry)

Human KU70 transcript siRNA sense oligonucleotide siRNA3.

protein interaction; short interfering RNA; siRNA; RNA interference;

gene silencing; ds.

Homo sapiens.

Synthetic.

Key Location/Qualifiers

misc_feature 20..21

/*tag= a

/note= "2'-deoxythymine overhang"

US2005112118-A1.

26-MAY-2005.

20-OCT-2003; 2003US-00690276.

02-DEC-1999; 99US-0168377P.

02-DEC-1999; 99US-0168379P.

25-FEB-2000; 2000US-0185056P.

01-DEC-2000; 2000US-00727384.

14-DEC-2000; 2000US-0255063P.

21-DEC-2000; 2000US-0256986P.

04-JAN-2001; 2001US-0259571P.

04-JAN-2001; 2001US-0259572P.

15-MAR-2001; 2001US-0276179P.

19-MAR-2001; 2001US-0277013P.

23-JUL-2001; 2001US-0307233P.

14-DEC-2001; 2001US-00014814.

21-DEC-2001; 2001US-00024599.

04-JAN-2002; 2002US-00035344.

14-MAR-2002; 2002US-00099924.

18-MAR-2002; 2002US-00100503.

(MYRI-) MYRIAD GENETICS INC.

Cimbroa D, Heichman K, Bartel P, Mauck K, Bush A;

WPI; 2005-371623/38.

Modulating, in a host cell, a protein-protein interaction between first

protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal

-regulated kinase 3) by administering modulating compound.

Disclosure; Fig 49; 296pp; English.

The invention relates to a method for modulating, in a host cell, a

protein-protein interaction between a first protein which is PRAK (P38-

regulated/activated protein kinase or MAPKAPK5) and a second protein

which is ERK3 (extracellular signal-regulated kinase 3). The method

comprises administering to the cell a compound capable of modulating the

protein-protein interaction. The method is useful in modulating in a host

cell a protein-protein interaction between a first protein which is PRAK

and a second protein which is ERK3 for treating inflammation or

inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile

chronic arthritis, myositis, Crohn's disease, gastritis, colitis,

ulcerative colitis, inflammatory bowel disease, proctitis, pelvic

inflammatory disease, systemic lupus erythematosus, rhinitis,

conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary

Lyme disease, psoriasis, dermatitis or eczema. The present sequence

represents an siRNA (short interfering RNA) oligonucleotide targeting the

KU70 transcript, which is used in the exemplification of the present

invention.

Sequence 21 BP; 5 A; 2 C; 7 G; 2 T; 5 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred. No. 8.1e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 2038 GATGAGCGTCATCCTTGAG 2056

||:|||||:|:|:|

Db 1 GAUGAGGCUAUCGUUGAG 19

RESULT 888

ADZ98949

CC The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an siRNA oligo which targets the transcript of a
CC protein forming part of a protein-protein complex of the invention.

XX Sequence 21 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1063 CCACGGATCTGACTACTCA 1081

DB 19 CCACGGATCTGACTACTCA 1

RESULT 892

AED42745/C
ID AED42745 standard; RNA; 21 BP.

XX AC AED42745;

XX 15-DEC-2005 (first entry)

XX Protein interacting gene transcript siRNA antisense oligo #171.

XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
KW Antiartherosclerotic; Muscular-Gen.; protein interaction;
KW protein microarray; cancer; familial adenomatous polyposis;
KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
KW muscular dystrophy; ss; short interfering RNA; RNA interference;
KW gene silencing.

XX Unidentified; Synthetic.

XX Key Location/Qualifiers

FT misc_feature 20..21 a

FT /note= "3' overhang comprising two 2'-deoxythymine
FT residues linked by a 5'-3' phosphodiester linkage"

XX US2005222029-A1.

XX 06-OCT-2005.

XX 07-MAR-2005; 2005US-00075234.

XX 04-JAN-2001; 2001US-0259571P.

XX 04-JAN-2001; 2001US-0259573P.

XX 14-MAR-2001; 2001US-0276259P.

XX 15-MAR-2001; 2001US-0276179P.

XX 19-MAR-2001; 2001US-0277013P.

XX 16-APR-2001; 2001US-0284095P.

XX 17-APR-2001; 2001US-0284220P.

XX 17-APR-2001; 2001US-0284404P.

XX 19-APR-2001; 2001US-0285324P.

PR 30-APR-2001; 2001US-0287513P.

PR 10-JUL-2001; 2001US-0304101P.

PR 23-JUL-2001; 2001US-0307233P.

PR 22-OCT-2001; 2001US-0347829P.

PR 25-OCT-2001; 2001US-0343818P.

PR 04-JAN-2002; 2002US-00035344.

PR 07-JAN-2002; 2002US-0346384P.

PR 17-JAN-2002; 2002US-0349843P.

PR 06-FEB-2002; 2002US-0354899P.

PR 14-MAR-2002; 2002US-00098979.

PR 18-MAR-2002; 2002US-00099924.

PR 15-APR-2002; 2002US-00100503.

PR 17-APR-2002; 2002US-00122573.

PR 17-APR-2002; 2002US-00124550.

PR 18-APR-2002; 2002US-00124757.

PR 29-APR-2002; 2002US-00125639.

XX (MYRI-) MYRIAD GENETICS INC.

XX Bartel P, Cimborra D, Sugiyama J, Wettstein DA, Heichman K;

XX WPI; 2005-664172/68.

XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.

XX Disclosure; Fig 62; 198pp; English.

XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an siRNA oligo which targets the transcript of a
CC protein forming part of a protein-protein complex of the invention.

XX Sequence 21 BP; 4 A; 5 C; 1 G; 2 T; 9 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1632 AGATTATCTGAGAAAGA 1650

DB 19 AGATTATCTGAGAAAGA 1

RESULT 893

AED42747/C

ID AED42747 standard; RNA; 21 BP.

XX AC AED42747;

XX 15-DEC-2005 (first entry)

XX Protein interacting gene transcript siRNA antisense oligo #172.

XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
KW Antiartherosclerotic; Muscular-Gen.; protein interaction;
KW protein microarray; cancer; familial adenomatous polyposis;

KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; ss; short interfering RNA; RNA interference;
 KW gene silencing.
 XX
 XX Unidentified, Synthetic.
 XX OS
 FH Key Location/Qualifiers
 FT misc_feature 20..21
 FT /tag= a
 FT /note= "3' overhang comprising two 2'-deoxythymine
 FT residues linked by a 5'-3' phosphodiester linkage"
 XX
 FN US2005222029-A1.
 XX
 XX
 PD 06-OCT-2005.
 XX
 PP 07-MAR-2005; 2005US-00075334.
 XX
 PR 04-JAN-2001; 2001US-0259571P.
 PR 04-JAN-2001; 2001US-0259573P.
 PR 14-MAR-2001; 2001US-0276259P.
 PR 15-MAR-2001; 2001US-0276179P.
 PR 19-MAR-2001; 2001US-0277013P.
 PR 16-APR-2001; 2001US-0284095P.
 PR 17-APR-2001; 2001US-0284220P.
 PR 17-APR-2001; 2001US-0284404P.
 PR 19-APR-2001; 2001US-0285324P.
 PR 30-APR-2001; 2001US-0287513P.
 PR 10-JUL-2001; 2001US-0304101P.
 PR 23-JUL-2001; 2001US-0307233P.
 PR 22-OCT-2001; 2001US-0347829P.
 PR 25-OCT-2001; 2001US-0343818P.
 PR 04-JAN-2002; 2002US-00035344.
 PR 07-JAN-2002; 2002US-0346384P.
 PR 17-JAN-2002; 2002US-0349843P.
 PR 06-FEB-2002; 2002US-0354899P.
 PR 14-MAR-2002; 2002US-00098979.
 PR 14-MAR-2002; 2002US-00099924.
 PR 18-MAR-2002; 2002US-00100503.
 PR 15-APR-2002; 2002US-00122573.
 PR 17-APR-2002; 2002US-00124550.
 PR 17-APR-2002; 2002US-00124767.
 PR 18-APR-2002; 2002US-00125639.
 PR 29-APR-2002; 2002US-00135802.
 XX
 PA (MYRI-) MYRIAD GENETICS INC.
 XX
 PI Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
 XX
 DR WPI; 2005-664172/68.
 XX
 XX
 PT New isolated protein complex having a first protein interacting with a
 PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
 PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
 XX
 PS Disclosure; Fig 62; 198pp; English.
 XX
 CC The invention relates to a novel isolated protein complex having a first
 CC protein interacting with a second protein. The invention further
 CC comprises: a protein microarray comprising the protein complex; a method
 CC for selecting modulators of the protein complex; a method of selecting
 CC modulators of an interaction between a first protein and a second protein
 CC ; and the treating and/or preventing of diseases and disorders associated
 CC with the protein complexes. The protein complexes are useful in screening
 CC assays for identifying compounds effective in modulating the protein
 CC complexes, and in treating and/or preventing diseases and disorders
 CC associated with the protein complexes. The diseases and disorders include
 CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
 CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,

CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an siRNA oligo which targets the transcript of a
 CC protein forming part of a protein-protein complex of the invention.
 XX
 SQ Sequence 21 BP; 5 A; 4 C; 2 G; 2 T; 8 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 858 AAAGTGTGTACATCAGTAA 876
 Db 19 AAAGTGTGTACATCAGTAA 1
 RESULT 894
 AAF98936/C
 ID AAF98936 standard; DNA; 22 BP.
 XX
 AC AAF98936;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #52.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.
 XX
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 25-SEP-2000; 2000WO-US026383.
 XX
 PR 25-SEP-1999; 99US-0156113P.
 PR 27-SEP-1999; 99US-0156135P.
 PR 23-AUG-2000; 2000US-0227436P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Schetter C, Vollmer J;
 XX
 DR WPI; 2001-273485/28.
 XX
 PT Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX
 PS Disclosure; Page 39; 338pp; English.
 XX
 CC The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 22 BP; 0 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;

```

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
    ||||| ||||| ||||| |||||
Db 22 AAAAAACAAAAAACAAAAAAA 1

RESULT 895
ABS77577/c
ID ABS77577 standard; DNA; 22 BP.
AC ABS77577;
XX
XX 13-DEC-2002 (first entry)
DT
XX
DE Angiogenesis inhibitory oligonucleotide #61.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophiliac joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
OS Synthetic.
XX
XX WO200253141-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 14-DEC-2001; 2001WO-US048458.
PF
XX
XX 14-DEC-2000; 2000US-0255534P.
PR
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX
XX Bratzler RL;
PI
XX
XX WPI; 2002-566690/60.
DR
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 20; 276pp; English.
PS
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 8.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
    ||||| ||||| ||||| |||||
Db 22 AAAAAACAAAAAACAAAAAAA 1

RESULT 897
ADB36438/c
ID ADB36438 standard; DNA; 22 BP.
XX
XX ADB36438;
AC
XX
XX 04-DEC-2003 (first entry)
DT
XX
DE Immunostimulatory nucleic acid #52.
XX
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
XX

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RESULT 896
ACD99369/c
ID ACD99369 standard; DNA; 22 BP.
XX
XX ACD99369;
AC
XX
XX 25-SEP-2003 (first entry)
DT
XX
DE Immunostimulatory nucleic acid #55.
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
XX US2003050268-A1.
PN
XX
XX 13-MAR-2003.
PD
XX
XX 29-MAR-2002; 2002US-00112653.
PF
XX
XX 29-MAR-2001; 2001US-0279642P.
PR
XX
XX (KRIE/) KRIEG A. M.
PA (BERG/) BERG D. J.
XX
XX Krieg AM, Berg DJ;
PI
XX
XX WPI; 2003-521815/49.
DR
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 10; 229pp; English.
PS
XX
XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 8.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
    ||||| ||||| ||||| |||||
Db 22 AAAAAACAAAAAACAAAAAAA 1

RESULT 897
ADB36438/c
ID ADB36438 standard; DNA; 22 BP.
XX
XX ADB36438;
AC
XX
XX 04-DEC-2003 (first entry)
DT
XX
DE Immunostimulatory nucleic acid #52.
XX
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
XX

```


CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primates, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
 CC invention.

XX
 SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 900

ADU89377/C
 ID ADU89377 standard; DNA; 22 BP.

AC ADU89377;

XX
 DT 10-FEB-2005 (first entry)

XX Allergic response suppressor oligonucleotide #61.

XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

XX Synthetic.

XX US2004235774-A1.

XX
 PD 25-NOV-2004.

XX 23-APR-2004; 2004US-00831778.

XX 03-FEB-2000; 2000US-0179991P.

PR 02-FEB-2001; 2001US-00776479.

XX (BRAT/) BRATZLER R L.

PA (PETE/) PETERSEN D M.

PA (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 61; 235pp; English.

XX The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an
 CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other

CC medicaments. They can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.

XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 901

AED74922/C
 ID AED74922 standard; DNA; 22 BP.

XX AED74922;

XX 12-JAN-2006 (first entry)

XX Immunostimulatory oligonucleotide, SEQ ID 55.

XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
 KW Antulcer; Dermatological; Antiallergic; helper T-lymphocyte;
 KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
 KW Crohn's disease; ulcerative colitis; eczema; skin allergy;
 KW contact dermatitis; ss.

XX Synthetic.

XX US2005250726-A1.

XX 10-NOV-2005.

XX 12-MAY-2005; 2005US-00127654.

XX 29-MAR-2001; 2001US-0279642P.

PR 29-MAR-2002; 2002US-00112653.

XX (IOWA) UNIV IOWA RES FOUND.

XX Krieg AM, Berg DJ;

XX WPI; 2005-768014/78.

XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 55; 59pp; English.

XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.

XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 902
ADV92331/c
ID ADV92331 standard; DNA; 23 BP.
XX AC
XX ADV92331;
XX DT 07-APR-2005 (first entry)
XX DE Splice site-specific primer #12.
XX KW Arbitrary fragment length polymorphism; AFLP; primer; PCR;
KW gene targeting; DNA mapping; ss.
XX OS Unidentified.
XX PN WO2005003393-A2.
XX PD 13-JAN-2005.
XX PF 02-JUL-2004; 2004WO-NL000471.
XX PR 02-JUL-2003; 2003WO-NL000486.
XX PA (KEYG-) KEYGENE NV.
XX Dirks RHG, Vogelaar A, Van Bijl MJT, Hogers RCJ;
PI WPI; 2005-081957/09.
XX DR
XX PT Use of splice site-specific primers or combination of splice site-
PT specific primers and arbitrary fragment length polymorphism primer, for
PT analyzing/amplifying nucleic acid sequence, or in development of PCR-
PT primers.
XX
PS Example 1; SEQ ID NO 12; 53pp; English.
XX
CC The invention relates to the use of one or more splice site-specific
CC primers and optionally one or more arbitrary fragment length polymorphism
CC (AFLP) primers, in a method for analyzing or amplifying a nucleic acid
CC sequence or in the development of PCR primers. The invention also relates
CC to using a PCR primer obtained by the method in the development of an
CC assay, preferably for the analysis of splice sites. The method is useful
CC in analyzing nucleic acid sequences for the presence or absence of splice
CC site-associated polymorphisms. The splice site-specific primers and AFLP
CC primers are useful in genotyping, genetic mapping, genetic profiling and
CC DNA identification techniques, e.g., to identify a specific species,
CC subspecies, variety, race or individual, to establish the presence or
CC absence of a specific inheritable trait and/or of a gene, or to determine
CC the state of a disease. The splice site-specific primers and AFLP primers
CC allow for efficient/exponential amplification. The splice site-specific
CC primers are suitable for increasing the informational content of AFLP
CC fingerprints. The primers have the capacity to target a large population
CC of splice sites present in the genome. This sequence represents a splice-
CC site specific primer of the invention.

Query Match 0.7%; Score 18.8; DB 1; Length 23;
Best Local Similarity 90.9%; Pred. NO. 8.7e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAATTTTTTTTAAAAA 2728
DB ||| TTTTCTTTTTTTTTTTTTTTT 1
22 CTGYAAAAAAATTTTTTTTAAAAA 1

RESULT 903
ADC17041/c
ID ADC17041 standard; DNA; 51 BP.
XX AC
XX ADC17041;


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PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2727
Db 20 TATAAAAAAAAAAAAAAAAAAAAA 1
RESULT 907
AAQ75585/c
ID AAQ75585 standard; DNA; 20 BP.
XX AC AAQ75585;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2706 ACTAAAAAATAAAAAAAAAAAAAA 2725
Db 20 AATAAAAAAAAAAAAAAAAAAAAA 1
RESULT 908
AAQ75579/c
ID AAQ75579 standard; DNA; 20 BP.
XX AC AAQ75579;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTTAAAAAATAAAAAAAAAAAAAA 1
RESULT 909
AAQ75563/c
ID AAQ75563 standard; DNA; 20 BP.
XX AC AAQ75563;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX

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aggregate; restriction enzyme; ss.
 Synthetic.
 JP06303997-A.
 01-NOV-1994.
 16-APR-1993; 93JP-00112515.
 16-APR-1993; 93JP-00112515.
 (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 WPI; 1995-018287/03.
 Analysis of cDNA and gene expression - by amplification of mRNA followed by digestion with restriction enzymes.
 Disclosure; Page 5; 11pp; Japanese.
 A method for the analysis of cDNA comprises (a) preparing an aggregate of double-stranded cDNAs by using an aggregate of mRNAs and a plural type of labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in separate lanes. The method can be used to analyse gene expression rapidly and easily
 Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2707 CTAAAAA 2726
 Db 20 CTCAAAAA 1
 RESULT 910
 AAQ75568/c
 ID AAQ75568 standard; DNA; 20 BP.
 AC AAQ75568;
 04-AUG-1995 (first entry)
 Reverse transcription primer used in cDNA analysis technique.
 Analysis; gene expression; reverse transcription; primer; cDNA; aggregate; restriction enzyme; ss.
 Synthetic.
 JP06303997-A.
 01-NOV-1994.
 16-APR-1993; 93JP-00112515.
 16-APR-1993; 93JP-00112515.
 (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 WPI; 1995-018287/03.
 Reverse transcription primer used in cDNA analysis technique.
 Analysis; gene expression; reverse transcription; primer; cDNA; aggregate; restriction enzyme; ss.
 Synthetic.
 JP06303997-A.
 01-NOV-1994.
 16-APR-1993; 93JP-00112515.
 16-APR-1993; 93JP-00112515.
 (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 WPI; 1995-018287/03.
 Analysis of cDNA and gene expression - by amplification of mRNA followed by digestion with restriction enzymes.
 Disclosure; Page 5; 11pp; Japanese.

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AAQ75593/c
ID AAQ75593 standard; DNA; 20 BP.
XX
AC AAQ75593;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
FN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 913
AAQ75561/c
ID AAQ75561 standard; DNA; 20 BP.
XX
AC AAQ75601;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
FN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 913
AAQ75561/c
ID AAQ75561 standard; DNA; 20 BP.
XX
AC AAQ75561;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
FN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

```


CC	oligonucleotide which is used in an example from the present invention
XX	
SQ	Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
	Query Match 0.7%; Score 18.4; DB 1; Length 20;
	Best Local Similarity 95.0%; Pred. No. 8.6e+02;
	Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	2707 CTAAAAAAAAAAAAAAAAAAAA 2726
Db	20 CCAAAAAAAAAAAAAAAAAAAAA 1
RESULT 921	
AAAL3754/C	
ID - AAAL3754 standard; DNA; 20 BP.	
XX AC AAAL3754;	
XX XX	
DT 27-JUL-2000 (first entry)	
XX XX	
DE Stem cell factor universal oligonucleotide 220-11.	
XX XX	
XX Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;	
KW primitive progenitor cell; haematopoietic disorder; syngeneic;	
KW allogeneic; autologous bone marrow transplant; gene therapy;	
KW transfection; haematopoietic stem cell; acute blood loss; neoplasia;	
KW cancer; ss.	
XX OS Synthetic.	
XX XX	
FN EP992579-A1.	
XX XX	
PD 12-APR-2000.	
XX XX	
PF 04-OCT-1990; 99EP-00122861.	
XX XX	
PR 16-OCT-1989; 89US-00422383.	
PR 11-JUN-1990; 90US-00537198.	
PR 24-AUG-1990; 90US-00573616.	
PR 28-SEP-1990; 90MO-US005348.	
PR 01-OCT-1990; 90US-00589701.	
PR 04-OCT-1990; 90EP-00310899.	
XX XX	
PA (AMGE-) AMGEN INC.	
XX XX	
PI Zebo KM, Suggs SV, Bosselmann RA, Martin FH;	
XX XX	
DR WPI; 2000-259135/23.	
XX XX	
PT Production of hematopoietic cells suitable for administration to a	
PT subject using progenitor cells and expanding the cells using stem cell	
PT factor.	
XX XX	
PS Example 3; Fig 12C; 123pp; English.	
PS PS	
XX XX	
CC A method has been developed of making haematopoietic cells suitable for	
CC administration to a subject. The method comprises: (a) obtaining	
CC haematopoietic progenitor cells from a donor; and (b) expanding the cells	
CC by adding to the cells a haematopoietically effective dose of a	
CC polypeptide product having at least part of the biological properties of naturally	
CC confirmation and one or more of the biological properties of naturally	
CC occurring stem cell factor (SCF). The method is useful for stimulating	
CC primitive progenitor cells including early haematopoietic progenitor	
CC cells which are capable of maturing to erythroid, megakaryocyte	
CC granulocyte, lymphocyte and macrophage cells. SCF results in absolute	
CC increases in haematopoietic cells of both myeloid and lymphoid lineages.	
CC SCF is useful for treating haematopoietic disorders. The method is useful	
CC for expanding early haematopoietic progenitors in syngeneic, allogeneic	
CC or autologous bone marrow transplant. SCF is useful for enhancing the	
CC efficiency of gene therapy based on transfecting haematopoietic stem	
CC cells. SCF is also useful for combating the myelosuppressive effects of	
CC anti-HIV drugs such as AZT and for enhancing haematopoietic recovery	

CC after acute blood loss and as a boost to the immune system for fighting
 CC neoplasia (cancer). The present sequence represents a universal
 CC oligonucleotide which is used in an example from the present invention
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2726
 DB 20 CCAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 922
 AAH41331/c
 ID AAH41331 standard; DNA; 20 BP.
 XX
 AC AAH41331;
 XX
 DT 21-AUG-2001 (first entry)
 XX
 DE Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:32.
 XX
 KW Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
 KW gene therapy; PCR primer; mutagenesis; probe; ss.
 XX
 OS Synthetic.
 XX
 PN US6207454-B1.
 XX
 PD 27-MAR-2001.
 XX
 PF 31-DEC-1998; 98US-00224681.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449653.
 PR 12-JAN-1998; 98US-00005893.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX WPI; 2001-366062/38.
 XX
 DR Enhancing efficiency of transfer of polynucleotide into a target
 PT mammalian cell in vitro, involves exposing cell that expresses a stem
 PT cell factor receptor to stem cell factor, and introducing polynucleotide
 PT into cell in vitro.
 XX
 PS Example 3; Fig 12C; 210pp; English.
 XX
 CC The present invention describes a method for enhancing (E) the efficiency
 CC of transfer of a polynucleotide (I) into a target mammalian cell (II) in
 CC vitro, comprising exposing (II) that expresses a stem cell factor (SCF)
 CC receptor to a biologically active SCF, its analogue or fragment, which
 CC induces cell proliferation, and introducing (I) to (II) in vitro.
 CC Exposure of SCF to (II) results in increased uptake of (I) into the cell.
 CC The method is useful for enhancing the efficiency of the transfer of a
 CC polynucleotide into a target mammalian cell in vitro. The method is
 CC useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to
 CC AAB98390 represent sequences used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2726
 DB 20 CCAAAAAAAAAAAAAAAAAAAAA 1

Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2726
 DB 20 CCAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 923
 AAH41333/c
 ID AAH41333 standard; DNA; 20 BP.
 XX
 AC AAH41333;
 XX
 DT 21-AUG-2001 (first entry)
 XX
 DE Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:34.
 XX
 KW Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
 KW gene therapy; PCR primer; mutagenesis; probe; ss.
 XX
 OS Synthetic.
 XX
 PN US6207454-B1.
 XX
 PD 27-MAR-2001.
 XX
 PF 31-DEC-1998; 98US-00224681.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449653.
 PR 12-JAN-1998; 98US-00005893.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX WPI; 2001-366062/38.
 XX
 DR Enhancing efficiency of transfer of polynucleotide into a target
 PT mammalian cell in vitro, involves exposing cell that expresses a stem
 PT cell factor receptor to stem cell factor, and introducing polynucleotide
 PT into cell in vitro.
 XX
 PS Example 3; Fig 12C; 210pp; English.
 XX
 CC The present invention describes a method for enhancing (E) the efficiency
 CC of transfer of a polynucleotide (I) into a target mammalian cell (II) in
 CC vitro, comprising exposing (II) that expresses a stem cell factor (SCF)
 CC receptor to a biologically active SCF, its analogue or fragment, which
 CC induces cell proliferation, and introducing (I) to (II) in vitro.
 CC Exposure of SCF to (II) results in increased uptake of (I) into the cell.
 CC The method is useful for enhancing the efficiency of the transfer of a
 CC polynucleotide into a target mammalian cell in vitro. The method is
 CC useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to
 CC AAB98390 represent sequences used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2726
 DB 20 CCAAAAAAAAAAAAAAAAAAAAA 1

```

RESULT 924
AAS04113/C
ID AAS04113 standard; DNA; 20 BP.
XX
XX AAS04113;
AC
XX
XX 29-AUG-2001 (first entry)
DT
XX
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
DE
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX US6207417-B1.
PN
XX
XX 27-MAR-2001.
PD
XX
XX 07-JUN-1995; 95US-00482918.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 21-DEC-1993; 93US-00172329.
XX
XX (ZSEB/) ZSEBO K M.
PA
XX (BOSS/) BOSSELMAN R A.
PA
XX (SUGG/) SUGGS S V.
PA
XX (MART/) MARTIN F H.
XX
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX
XX WPI; 2001-298941/31.
DR
XX
XX Novel nucleic acids encoding stem cell factor useful for treating
PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's
PT disease, Kala azar, anemia and septicemia.
PT
XX
XX Example 3; Fig 12C; 209pp; English.
PS
XX
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8 6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
DB 20 CGAAAAAA 1

RESULT 926

```

```

RESULT 925
AAS04111/C
ID AAS04111 standard; DNA; 20 BP.
XX
XX AAS04111;
AC
XX
XX 29-AUG-2001 (first entry)
DT
XX
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
DE
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX US6207417-B1.
PN
XX
XX 27-MAR-2001.
PD
XX
XX 07-JUN-1995; 95US-00482918.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 21-DEC-1993; 93US-00172329.
XX
XX (ZSEB/) ZSEBO K M.
PA
XX (BOSS/) BOSSELMAN R A.
PA
XX (SUGG/) SUGGS S V.
PA
XX (MART/) MARTIN F H.
XX
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX
XX WPI; 2001-298941/31.
DR
XX
XX Novel nucleic acids encoding stem cell factor useful for treating
PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's
PT disease, Kala azar, anemia and septicemia.
PT
XX
XX Example 3; Fig 12C; 209pp; English.
PS
XX
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8 6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1

RESULT 926

```

AAAF89091/c
 ID AAAF89091 standard; DNA; 20 BP.
 XX
 AC AAAF89091;
 XX
 DT 13-JUL-2001 (first entry)
 XX
 DE Mammalian stem cell factor PCR primer SEQ ID NO: 32.
 XX
 KW Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
 KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
 KW neurological damage; intestinal damage; infertility; AIDS; SCID;
 KW severe combined immunodeficiency; PCR primer; ss.
 XX
 OS Mammalia.
 XX
 FN US6207802-B1.
 XX
 PD 27-MAR-2001.
 XX
 PF 09-NOV-1994; 94US-00336728.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 25-NOV-1992; 92US-00982255.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
 XX
 DR WPI; 2001-353108/37.
 XX
 PT Novel isolated non-human mammalian stem cell factor polypeptide
 PT stimulating growth of early hematopoietic progenitor cells, useful for
 PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
 PT sarcoidosis.
 XX
 PS Example 3; Fig 12C; 209pp; English.
 XX
 CC The present invention provides the protein and coding sequences of
 CC mammalian stem cell factors (SCFs). These are capable of stimulating the
 CC growth of early haematopoietic progenitor cells, neural stem cells and
 CC primordial germ stem cells. The sequences are useful in the treatment of
 CC leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
 CC nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
 CC and intestinal damage, infertility, AIDS and severe combined
 CC immunodeficiency (SCID). The present sequence is primer used to amplify
 CC an SCF in the exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 Db 20 CCAAAAAAAAAAAAAAAAAA 1
 RESULT 927
 AAAF89093/c
 ID AAAF89093 standard; DNA; 20 BP.
 XX
 AC AAAF89093;
 XX
 DT 13-JUL-2001 (first entry)
 XX
 DE Mammalian stem cell factor PCR primer SEQ ID NO: 34.
 XX
 KW Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;

Gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
 neurological damage; intestinal damage; infertility; AIDS; SCID;
 severe combined immunodeficiency; PCR primer; ss.
 Mammalia.
 US6207802-B1.
 27-MAR-2001.
 09-NOV-1994; 94US-00336728.
 16-OCT-1989; 89US-00422383.
 11-JUN-1990; 90US-00537198.
 24-AUG-1990; 90US-00573616.
 01-OCT-1990; 90US-00589701.
 25-NOV-1992; 92US-00982255.
 (AMGE-) AMGEN INC.
 Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
 WPI; 2001-353108/37.
 Novel isolated non-human mammalian stem cell factor polypeptide
 stimulating growth of early hematopoietic progenitor cells, useful for
 treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
 sarcoidosis.
 Example 3; Fig 12C; 209pp; English.
 The present invention provides the protein and coding sequences of
 mammalian stem cell factors (SCFs). These are capable of stimulating the
 growth of early haematopoietic progenitor cells, neural stem cells and
 primordial germ stem cells. The sequences are useful in the treatment of
 leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
 nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
 and intestinal damage, infertility, AIDS and severe combined
 immunodeficiency (SCID). The present sequence is primer used to amplify
 an SCF in the exemplification of the invention
 Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 Db 20 CCAAAAAAAAAAAAAAAAAA 1
 RESULT 928
 AAAH23889/c
 ID AAAH23889 standard; DNA; 20 BP.
 XX
 AC AAAH23889;
 XX
 DT 07-AUG-2001 (first entry)
 XX
 DE Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
 XX
 KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
 KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
 KW anaemia; Kala azar; septicaemia; malaria; hypopigmentation disorder;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN US6204363-B1.
 XX
 PD 20-MAR-2001.
 XX

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PF 25-NOV-1992; 92US-00982255.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-256683/26.
XX
XX New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
PT disease.
XX
XX Example 3; Fig 12C; 166pp; English.
XX
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
CC B12 and folic acid deficiency, pyridoxine deficiency, and
CC hypopigmentation disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CCAAAAAA 1

RESULT 929
AAH23891/c
ID AAH23891 standard; DNA; 20 BP.
XX
XX AAH23891;
XX
XX 07-AUG-2001 (first entry)
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX anaemia; kala azar; septicemia; malaria; hypopigmentation disorder;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6204363-B1.
XX
XX 20-MAR-2001.
XX
XX 25-NOV-1992; 92US-00982255.
XX
XX 16-OCT-1989; 89US-00422383.

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PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-256683/26.
XX
XX New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
PT disease.
XX
XX Example 3; Fig 12C; 166pp; English.
XX
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
CC B12 and folic acid deficiency, pyridoxine deficiency, and
CC hypopigmentation disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CCAAAAAA 1

RESULT 930
AAS04214/c
ID AAS04214 standard; DNA; 20 BP.
XX
XX AAS04214;
XX
XX 29-AUG-2001 (first entry)
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX anaemia; kala azar; septicemia; malaria; hypopigmentation disorder;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6218148-B1.
XX
XX 17-APR-2001.
XX
XX 21-DEC-1993; 93US-00172329.
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.

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PR 25-NOV-1992; 92US-00982255.
XX (AMGE-) AMGEN INC.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2001-281051/29.
XX
XX Isolated DNA sequence, encoding polypeptide product useful for
PT stimulating growth of early hematopoietic progenitor cells.
XX
XX Example 3; Fig 12C; 167pp; English.
XX
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
CC cells including early hematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCP and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAA...AAAAAAAAA 2726
Db 20 CGAAAAA...AAAAAAAAA 1

RESULT 931
AAS04212/c
ID AAS04212 standard; DNA; 20 BP.
XX
XX AAS04212;
XX
XX 29-AUG-2001 (first entry)
XX
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX
XX Human; stem cell factor; SCF; early hematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6218148-B1.
XX
XX 17-APR-2001.
XX
XX 21-DEC-1993; 93US-00172329.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI

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XX WPI; 2001-281051/29.
XX
XX Isolated DNA sequence, encoding polypeptide product useful for
PT stimulating growth of early hematopoietic progenitor cells.
XX
XX Example 3; Fig 12C; 167pp; English.
XX
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
CC cells including early hematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCP and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAA...AAAAAAAAA 2726
Db 20 CCAAAAA...AAAAAAAAA 1

RESULT 932
AAS10447/c
ID AAS10447 standard; DNA; 20 BP.
XX
XX AAS10447;
XX
XX 24-OCT-2001 (first entry)
XX
XX Human stem cell factor (SCF) cDNA universal PCR primer 220-3.
XX
XX Human; stem cell factor; SCF; hematopoietic progenitor cell;
KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6248319-B1.
XX
XX 19-JUN-2001.
XX
XX 24-MAY-1995; 95US-00449653.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX 21-DEC-1993; 93US-00172329.
XX
XX (ZSEB/) ZSEBO K M.
XX (BOSS/) BOSSELMAN R A.
XX (SUGG/) SUGGS S V.
XX (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI

```

DR WPI; 2001-407312/43.

XX Increasing the number of early hematopoietic progenitor cells in the

PT peripheral blood useful for the treatment of blood disorders including

PT Hodgkin's disease comprises the administration of human stem cell factor.

XX

PS Example 3; Fig 12C; 210pp; English.

XX

CC The present sequence for universal PCR primer 220-3 is 1 of 19 PCR

CC primers (AAS10435-AAS10453) used to amplify various portions of the human

CC SCF cDNA sequence. The sequence is described in an invention relating to

CC novel stem cell factors, the polynucleotides encoding them and methods

CC for producing the stem cell factors. The methods involve increasing the

CC number of early hematopoietic progenitor cells in human peripheral blood

CC by administering a haematopoietically effective human stem cell factor

CC polypeptide. The methods are useful for the treatment of blood disorders,

CC including myelofibrosis, myeloclerosis, osteopetrosis, metastatic

CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,

CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,

CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation

CC disorders i.e. piebaldism and viral induced disorders, including AIDS

XX

SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 8.6e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726

Db | | | | | | | | | | | | | | | | | | | | | |

20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 933

AAS10449/c

ID AAS10449 standard; DNA; 20 BP.

XX

AC AAS10449;

XX

DT 24-OCT-2001 (first entry)

XX

DE Human stem cell factor (SCF) cDNA universal PCR primer 220-11.

XX

XX Human; stem cell factor; SCF; haematopoietic progenitor cell;

KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;

KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.

XX

OS Homo sapiens.

XX

PN US6248319-B1.

XX

PD 19-JUN-2001.

XX

PF 24-MAY-1995; 95US-00449653.

XX

PR 16-OCT-1989; 89US-00422383.

PR 11-JUN-1990; 90US-00537198.

PR 24-AUG-1990; 90US-00573616.

PR 01-OCT-1990; 90US-00589701.

PR 10-APR-1991; 91US-00684535.

PR 25-NOV-1992; 92US-00982255.

PR 21-DEC-1993; 93US-00173229.

XX

(ZSEB/) ZSEBO K M.

PA (BOSS/) BOSSELMAN R A.

PA (SUGG/) SUGGS S V.

PA (MART/) MARTIN F H.

XX

PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;

XX

XX WPI; 2001-407312/43.

XX

PT Increasing the number of early hematopoietic progenitor cells in the

PT peripheral blood useful for the treatment of blood disorders including

PT Hodgkin's disease comprises the administration of human stem cell factor.

XX

PS Example 3; Fig 12C; 210pp; English.

XX

CC The present sequence for universal PCR primer 220-11 is 1 of 19 PCR

CC primers (AAS10435-AAS10453) used to amplify various portions of the human

CC SCF cDNA sequence. The sequence is described in an invention relating to

CC novel stem cell factors, the polynucleotides encoding them and methods

CC for producing the stem cell factors. The methods involve increasing the

CC number of early haematopoietic progenitor cells in human peripheral blood

CC by administering a haematopoietically effective human stem cell factor

CC polypeptide. The methods are useful for the treatment of blood disorders,

CC including myelofibrosis, myeloclerosis, osteopetrosis, metastatic

CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,

CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,

CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation

CC disorders i.e. piebaldism and viral induced disorders, including AIDS

XX

SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 8.6e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726

Db | | | | | | | | | | | | | | | | | | | | | |

20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 934

AAD35464/c

ID AAD35464 standard; DNA; 20 BP.

XX

AC AAD35464;

XX

DT 25-JUL-2002 (first entry)

XX

DE Rat SCF 5' cDNA amplifying PCR primer, 220-3.

XX

KW Rat; stem cell factor; SCF protein; leucopaenia; thrombocytopaenia;

KW anaemia; myelosuppression; nerve damage; myeloproliferative disorder;

KW infertility; neoplasia; myelofibrosis; myeloclerosis; osteopetrosis;

KW metastatic carcinoma; acute leukaemia; multiple myeloma; sarcooidosis;

KW Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;

KW Letterer-Siwe disease; refractory erythroblastic anaemia; Kala azar;

KW Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;

KW disseminated fungus disease; Fulminating septicaemia; piebaldism; AIDS;

KW acquired immune deficiency syndrome; malaria; military tuberculosis;

KW pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;

KW Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;

XX

OS Rattus sp.

XX

PN US2002018763-A1.

XX

PD 14-FEB-2002.

XX

PF 12-JAN-1998; 98US-00005243.

XX

PR 24-MAY-1995; 95US-00449653.

XX

(ZSEB/) ZSEBO K M.

PA (BOSS/) BOSSELMAN R A.

PA (SUGG/) SUGGS S V.

PA (MART/) MARTIN F H.

XX

PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;

XX

XX WPI; 2002-350789/38.

XX

PT Novel non-naturally-occurring stem cell factor polypeptide, useful for

PT treating leucopenia, thrombocytopenia, anemia and for enhancing
 PT engraftment of bone marrow during transplantation in a mammal.
 XX
 PS Example 3; Fig 12C; 217pp; English.
 XX
 CC The present invention relates to novel non-naturally-occurring stem cell
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently
 CC duplicative of that of naturally-occurring SCF to allow possession of
 CC hematopoietic biological activity of naturally occurring SCF. Sequences
 CC of the invention are useful for treating leucopenia, thrombocytopenia,
 CC anaemia and for enhancing bone marrow recovery in treatment of radiation,
 CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
 CC are also useful for treating acquired immune deficiency in a human, nerve
 CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal
 CC damage in a mammal. SCF sequences are useful for preparing biologically
 CC active polymer polypeptide adduct, for enhancing transfection of early
 CC hematopoietic progenitor cells with a gene, and transfer of a gene into
 CC a mammal. They are useful for treating myelofibrosis, myeloclesterosis,
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
 CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, malaria, military
 CC tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
 CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
 CC and vitiligo. The present sequence is a PCR primer which is used for
 CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 20 CCAAGAAAAA 1
 RESULT 935
 AAD35466/c
 ID AAD35466 standard; DNA; 20 BP.
 XX
 AC AAD35466;
 XX
 DT 25-JUL-2002 (first entry)
 XX
 DE Rat SCF 5' cDNA amplifying PCR primer, 220-11.
 XX
 KW Rat; stem cell factor; SCF protein; leucopenia; thrombocytopenia;
 KW anaemia; myelosuppression; nerve damage; myeloproliferative disorder;
 KW infertility; neoplasia; myelofibrosis; myeloclesterosis; osteopetrosis;
 KW metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;
 KW Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;
 KW Letterer-Siwe disease; refractory erythroblastic anaemia; Kala azar;
 KW Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;
 KW disseminated fungus disease; Fulminating septicaemia; piebaldism; AIDS;
 KW acquired immune deficiency syndrome; malaria; military tuberculosis;
 KW pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;
 KW Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;
 KW primer; ss.
 XX
 OS Rattus sp.
 XX
 PN US2002018763-A1.
 XX
 PD 14-FEB-2002.
 XX
 PF 12-JAN-1998; 98US-00005243.
 XX

PR 24-MAY-1995; 95US-00449653.
 XX
 PA (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 PI Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
 XX WPI; 2002-350789/38.
 DR
 XX Novel non-naturally-occurring stem cell factor polypeptide, useful for
 PT treating leucopenia, thrombocytopenia, anemia and for enhancing
 PT engraftment of bone marrow during transplantation in a mammal.
 XX
 PS Example 3; Fig 12C; 217pp; English.
 XX
 CC The present invention relates to novel non-naturally-occurring stem cell
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently
 CC duplicative of that of naturally-occurring SCF to allow possession of
 CC hematopoietic biological activity of naturally occurring SCF. Sequences
 CC of the invention are useful for treating leucopenia, thrombocytopenia,
 CC anaemia and for enhancing bone marrow recovery in treatment of radiation,
 CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
 CC are also useful for treating acquired immune deficiency in a human, nerve
 CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal
 CC damage in a mammal. SCF sequences are useful for preparing biologically
 CC active polymer polypeptide adduct, for enhancing transfection of early
 CC hematopoietic progenitor cells with a gene, and transfer of a gene into
 CC a mammal. They are useful for treating myelofibrosis, myeloclesterosis,
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
 CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, malaria, military
 CC tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
 CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
 CC and vitiligo. The present sequence is a PCR primer which is used for
 CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 20 CCAAGAAAAA 1
 RESULT 936
 ABS73848/c
 ID ABS73848 standard; DNA; 20 BP.
 XX
 AC ABS73848;
 XX
 DT 05-DEC-2002 (first entry)
 XX
 DE SCF universal oligonucleotide 220-3.
 XX
 KW Stem cell factor; SCF; blood-forming system; blood cell disorder;
 KW hematopoietic system; metastatic carcinoma; acute leukaemia;
 KW multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
 KW refractory erythroblastic anaemia; miliary tuberculosis; cytostatic;
 KW disseminated fungus disease; hematopoietic; tuberculostatic;
 KW antianaemic; antifungal; antimalarial; dermatological; ss.
 XX
 OS Synthetic.
 XX


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PN EP1241258-A2.
XX
PD 18-SEP-2002.
XX
PF 04-OCT-1990; 2002EP-00008587.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
XX
PA (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Suggs SV, Bosselman RA, Martin FH;
XX WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
XX Example 3; Fig 12C; 120pp; English.
XX
XX The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, military tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CCAAAAAA 1

RESULT 937
ABS73850/c
ID ABS73850 standard; DNA; 20 BP.
XX
AC ABS73850;
XX
XX 05-DEC-2002 (first entry)
XX
XX SCF universal oligonucleotide 220-11.
XX
XX Stem cell factor; SCF; blood-forming system; blood cell disorder;
KW haematopoietic system; metastatic carcinoma; acute leukaemia;
KW multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
KW refractory erythroblastic anaemia; military tuberculosis; cytostatic;
KW disseminated fungus disease; haematopoietic; tuberculous;
KW antianaemic; antifungal; antimalarial; dermatological; ss.
XX
XX Synthetic.
OS
XX EP1241258-A2.
PN
XX 18-SEP-2002.
PD

```

```

PF 04-OCT-1990; 2002EP-00008587.
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
XX
PA (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Suggs SV, Bosselman RA, Martin FH;
XX WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
XX Example 3; Fig 12C; 120pp; English.
XX
XX The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, military tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CCAAAAAA 1

RESULT 938
ADE52460/c
ID ADE52460 standard; DNA; 20 BP.
XX
AC ADE52460;
XX
XX 29-JAN-2004 (first entry)
XX
XX Stem cell factor (SCF) related DNA #31.
XX
XX Stem cell factor; SCF; haematopoietic activity; infertility;
KW intestinal damage; myeloproliferative disorder; leucopenia;
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
KW military tuberculosis; haematopoietic progenitor cell; ss.
XX
XX Synthetic.
OS
XX US2002031491-A1.
PN
XX 14-MAR-2002.
PD
XX
XX 31-DEC-1998; 98US-00224683.
PF
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.

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PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
PA (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2003-851459/79.
XX
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or
XX immune deficiency, also related nucleic acid and antibodies.
XX
PS Disclosure; SEQ ID NO 32; 217pp; English.
XX
CC The invention relates to stem cell factor (SCF) polypeptides with
CC haematopoietic activity and the polynucleotides encoding them. The
CC polypeptides are used for treating infertility, intestinal damage,
CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
CC marrow recovery after radiotherapy or chemotherapy and in treatment of
CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are
CC also used to expand haematopoietic progenitor cells for transplantation
CC and to prepare such cells for transfection with a gene. The SCF
CC polynucleotides can be used for recombinant expression of the
CC polypeptides and also as probes for mapping of the SCF gene, for
CC identifying SCF-related diseases and as a marker for neighbouring genes.
CC Antibodies raised against the polypeptides are useful in diagnosis and to
CC remove SCF from blood. This sequence represents SCF related DNA of the
CC invention.
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAA 2726
Db 20 CCAAGAAAAA 1

RESULT 939
ADE52462/c
ID ADE52462 standard; DNA; 20 BP.
XX
AC ADE52462;
XX
XX 29-JAN-2004 (first entry)
XX
DE Stem cell factor (SCF) related DNA #33.
XX
KW Stem cell factor; SCF; haematopoietic activity; infertility;
KW intestinal damage; myeloproliferative disorder; leucopenia;
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
KW military tuberculosis; haematopoietic progenitor cell; ss.
XX
OS Synthetic.
XX
XX US2002031491-A1.
XX
XX 14-MAR-2002.
XX
XX 31-DEC-1998; 98US-00224683.
XX

```

```

PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
PA (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2003-851459/79.
XX
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or
XX immune deficiency, also related nucleic acid and antibodies.
XX
PS Disclosure; SEQ ID NO 34; 217pp; English.
XX
CC The invention relates to stem cell factor (SCF) polypeptides with
CC haematopoietic activity and the polynucleotides encoding them. The
CC polypeptides are used for treating infertility, intestinal damage,
CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
CC marrow recovery after radiotherapy or chemotherapy and in treatment of
CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
CC carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are
CC also used to expand haematopoietic progenitor cells for transplantation
CC and to prepare such cells for transfection with a gene. The SCF
CC polynucleotides can be used for recombinant expression of the
CC polypeptides and also as probes for mapping of the SCF gene, for
CC identifying SCF-related diseases and as a marker for neighbouring genes.
CC Antibodies raised against the polypeptides are useful in diagnosis and to
CC remove SCF from blood. This sequence represents SCF related DNA of the
CC invention.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAA 2726
Db 20 CGAAGAAAAA 1

RESULT 940
ABZ85312/c
ID ABZ85312 standard; DNA; 20 BP.
XX
AC ABZ85312;
XX
XX 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX W0200285308-A2.
XX

```

```

PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 554; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAGAAAAAAAAAAAAA 2727
Db 20 TGAAGAAAAAAAAAAAAAAAAA 1

RESULT 941
ABZ89301
ID ABZ89301 standard; DNA; 20 BP.
XX
XX ABZ89301;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX

```

```

PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 4543; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 17 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAAAAAAAAAAAA 2726
Db 1 CTCAGAAAAAAAAAAAAAAAAA 20

RESULT 942
ABZ89085
ID ABZ89085 standard; DNA; 20 BP.
XX
XX ABZ89085;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX

```

PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 4327; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AGAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 943
 ABD25315
 ID ABD25315 standard; DNA; 20 BP.
 XX
 AC ABD25315;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1092429-derived oligonucleotide SEQ ID 4327.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX

PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4327; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC Transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AGAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 944
 ABD21542/c
 ID ABD21542 standard; DNA; 20 BP.
 XX
 AC ABD21542;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE S100 calcium binding protein A2-derived oligo SEQ ID 554.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytotatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 554; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
XX | |||||

Db 20 TAAAAAAAAAAAAAAAAAAAAA 1
RESULT 945
ABD25531
ID ABD25531 standard; DNA; 20 BP.
XX
XX ABD25531;
XX
XX 29-JUL-2004 (first entry)
XX
XX AI125651-derived oligonucleotide SEQ ID 4543.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytotatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4543; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic, is a
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
XX | |||||

CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 17 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
 |||||
 Db 1 CTCAGAAAAA 20

RESULT 946
 ADH67400/C
 ID ADH67400 standard; DNA; 20 BP.
 XX
 AC ADH67400;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #4234.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.

XX WO2003099215-A2.
 XX 04-DEC-2003.
 XX 20-MAY-2003; 2003WO-US016084.
 XX 20-MAY-2002; 2002US-0381857P.
 XX (PHAA) PHARMACIA CORP.
 XX Crosby SD, Naleeth AE;

XX WPI; 2004-035034/03.
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 XX
 PS Claim 4; SEQ ID NO 4234; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAGAAAAA 2727
 |
 Db 20 TCAGAAAAA 1

RESULT 947
 ADK67452
 ID ADK67452 standard; DNA; 20 BP.
 XX
 AC ADK67452;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Electrochemical detection intercalator-related DNA 2.
 XX
 KW intercalator; electrochemical detection; mismatch; ss.
 XX
 OS Synthetic.

XX JP2004024114-A.
 XX 29-JAN-2004.
 XX 26-JUN-2002; 2002JP-00185555.
 XX 26-JUN-2002; 2002JP-00185555.
 XX (TAKE/) TAKENAKA S.
 XX (TUMK-) TUM KENKYUSHO KK.
 XX WPI; 2004-207136/20.
 XX Novel intercalator, useful as electrochemical double stranded DNA
 PT detection reagent.
 XX
 PS Example 1; Page 23; 24pp; Japanese.

XX The invention relates to a novel intercalator having a specific formula.
 CC The intercalator of the invention may be useful for the electrochemical
 CC detection of a gene, as an electrochemical double stranded DNA detection
 CC reagent and as an intercalator for inhibiting the influence of mismatch of
 CC DNA and single stranded DNA. The intercalator enables the transmission of
 CC electronic transition between two base pairs to occur efficiently. The
 CC current sequence is that of the electrochemical detection intercalator-
 CC related DNA 2 of the invention.

XX Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
 |||||
 Db 1 AAAAAAAGAAAAA 20

RESULT 948
 ADK74442/c
 ID ADK74442 standard; DNA; 20 BP.
 XX
 AC ADK74442;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1776.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.

XX WO2004016754-A2.
 XX 26-FEB-2004.
 XX 14-AUG-2003; 2003WO-US025465.

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XX 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Roberds SL;
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 1776; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'-MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAA 2727
Db 20 TCAAAAAAAAAAAAAAAAAA 1

RESULT 949
ADM14467/c
ID ADM14467 standard; DNA; 20 BP.
XX
AC ADM14467;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:654.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT

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FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 654; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
Db 20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 950
ADP69247/c
ID ADP69247 standard; DNA; 20 BP.
XX
XX ADP69247;
XX
XX 09-SEP-2004 (first entry)
XX
XX Human mitoNEET-specific antisense oligonucleotide #141.
XX
XX human; antisense oligonucleotide; mitochondrial membrane;
KW insulin sensitising antidiabetic thiazolidinediones; mitoNEET; diabetes;
KW immunological disorder; cardiovascular disorder; including hypertension;
KW neurological disorders; ischaemia; reperfusion; ss;
KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.

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XX OS Homo sapiens.
XX PN WO2004053060-A2.
XX PD 24-JUN-2004.
XX PF 25-NOV-2003; 2003WO-US037621.
XX PR 06-DEC-2002; 2002US-0431529P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Colca JR;
XX DR WPI; 2004-468836/44.
XX PT New antisense oligonucleotides encoding mitONEET, useful for modulating
XX FT mitONEET expression or for treating diseases associated with mitONEET,
XX PR e.g. diabetes, immunological disorders or cardiovascular disorders.
XX PS Claim 4; SEQ ID NO 141; 226pp; English.
XX CC The invention comprises antisense oligonucleotides that are targeted to
XX CC the nucleic acids encoding a family of human proteins from mitochondrial
XX CC membranes, which bind insulin sensitising, antidiabetic
XX CC thiazolidinediones (referred to as: mitONEET). The antisense
XX CC oligonucleotides of the invention are useful for modulating mitONEET
XX CC expression and for treating diseases or conditions associated with
XX CC mitONEET, such as: diabetes, immunological disorders, cardiovascular
XX CC disorders including hypertension, neurological disorders, and
XX CC ischaemia/reperfusion injuries. The present DNA sequence represents a
XX CC mitONEET-specific antisense oligonucleotide of the invention. NOTE: The
XX CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX CC phosphorothioate backbone.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
Db 20 TAAACAAAAAAAAAAAAAAAAAAA 1

RESULT 951
ADP69193/c
ID ADP69193 standard; DNA; 20 BP.
XX AC ADP69193;
XX DT 09-SEP-2004 (first entry)
XX DE Human mitONEET-specific antisense oligonucleotide #87.
XX KW human; antisense oligonucleotide; mitochondrial membrane;
XX KW insulin sensitising antidiabetic thiazolidinediones; mitONEET; diabetes;
XX KW immunological disorder; cardiovascular disorder; including hypertension;
XX KW neurological disorders; ischaemia; reperfusion; ss;
XX KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
XX OS Homo sapiens.
XX PN WO2004053060-A2.
XX PD 24-JUN-2004.
XX PF 25-NOV-2003; 2003WO-US037621.
XX PR 06-DEC-2002; 2002US-0431529P.
XX
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PA (PHAA ) PHARMACIA CORP.
XX Colca JR;
XX WPI; 2004-468836/44.
XX PT New antisense oligonucleotides encoding mitONEET, useful for modulating
XX FT mitONEET expression or for treating diseases associated with mitONEET,
XX PR e.g. diabetes, immunological disorders or cardiovascular disorders.
XX PS Claim 4; SEQ ID NO 87; 226pp; English.
XX CC The invention comprises antisense oligonucleotides that are targeted to
XX CC the nucleic acids encoding a family of human proteins from mitochondrial
XX CC membranes, which bind insulin sensitising, antidiabetic
XX CC thiazolidinediones (referred to as: mitONEET). The antisense
XX CC oligonucleotides of the invention are useful for modulating mitONEET
XX CC expression and for treating diseases or conditions associated with
XX CC mitONEET, such as: diabetes, immunological disorders, cardiovascular
XX CC disorders including hypertension, neurological disorders, and
XX CC ischaemia/reperfusion injuries. The present DNA sequence represents a
XX CC mitONEET-specific antisense oligonucleotide of the invention. NOTE: The
XX CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX CC phosphorothioate backbone.
XX SQ Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAACAAAAAAAAAAAAAAAAAAA 1

RESULT 952
ADP99304/c
ID ADP99304 standard; DNA; 20 BP.
XX AC ADP99304;
XX DT 23-SEP-2004 (first entry)
XX DE Stem cell factor, SCF, universal PCR primer #4.
XX KW SCF; stem cell factor; gene therapy; haematopoietic progenitor cell;
XX KW aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
XX KW myelocytosis; osteopetrosis; metastatic carcinoma; acute leukaemia;
XX KW multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
XX KW Niemann-Pick disease; Letterer-Siwe disease;
XX KW refractory erythroblastic anaemia; Di Guglielmo syndrome;
XX KW congestive splenomegaly; Kala awar; sarcoidosis;
XX KW primary splenic pancytopenia; milary tuberculosis;
XX KW disseminated fungus disease; Fulminating septicemia; malaria;
XX KW vitamin B12 deficiency; folic acid deficiency; pyridoxine deficiency;
XX KW Diamond Blackfan anaemia; hypopigmentation disorder; piebaldism;
XX KW vitiligo; neurological damage; infertility; intestinal damage;
XX KW irradiation; chemotherapy; AIDS; haematopoietic recovery;
XX KW acute blood loss; neoplasm; cancer; ss; PCR; primer.
XX OS Mammalia.
XX PN US6759215-B1.
XX PD 06-JUL-2004.
XX PF 07-AUG-2000; 2000US-00635251.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX
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PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449182.
PA (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2004-497128/47.
XX
XX Preparing a human stem cell factor (SCF) polypeptide, useful for treating
XX hematopoietic disorders, e.g., aplastic anemia, comprises growing host
XX cells transformed or transfected with DNA encoding a human SCF.
XX
XX Example 3; SEQ ID NO 34; 210pp; English.
XX
XX The invention relates to preparing a (vertebrate) human stem cell factor
XX (SCF) polypeptide comprising growing host cells transformed or
XX transfected with DNA encoding a human SCF that stimulates growth of
XX hematopoietic progenitor cells under nutrient conditions, the DNA being
XX operatively linked to an expression control sequence, and isolating the
XX polypeptide produced. Also included is a recombinant host cell
XX transformed or transfected with an expression construct comprising a
XX vertebrate SCF polypeptide-encoding DNA operatively linked to a
XX heterologous expression regulatory sequence, permitting the expression of
XX the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat
XX and human nucleic acids encoding SCF, SCF proteins from a number of other
XX mammals and recombinantly expressed SCF protein fragments. The DNA
XX sequences are useful for effecting the large scale synthesis of SCF by a
XX variety of recombinant techniques or for generating new and useful viral
XX and circular plasmid DNA vectors, new and useful transformed and
XX transfected prokaryotic and eukaryotic host cells, and new and useful
XX methods for cultured growth of such host cells capable of expression of
XX SCF and its related products. The DNA sequences are also useful as
XX labelled probes in isolating human genomic DNA encoding SCF, in methods
XX of protein synthesis, in genetic therapy in humans and other mammals, and
XX in developing transgenic mammalian species which may serve as eukaryotic
XX hosts for production of SCF and SCF products in quantity. The SCF is
XX useful for treating haematopoietic disorders, e.g., aplastic anaemia,
XX osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
XX Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
XX syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
XX splenic pancytopenia, malaria, vitamin B 12 and folic acid deficiency,
XX pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
XX disorders such as piebaldism and vitiligo. The SCF are also useful for
XX treating neurological damage, infertility states, intestinal damage
XX resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
XX for enhancing haematopoietic recovery after acute blood loss and as a
XX boost to the immune system for fighting neoplasia (cancer). The present
XX sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2726
| | | | | | | | | | | | | | | | | | | | | |
Db 20 CGAAGAAAAAAGAAAAA 1

RESULT 953
ADP99302/c
ID ADP99302 standard; DNA; 20 BP.
XX
XX ADP99302;
XX
XX 23-SEP-2004 (first entry)

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XX Stem cell factor, SCF, universal PCR primer #2.
DE
XX SCF; stem cell factor; gene therapy; haematopoietic progenitor cell;
XX aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
XX myelosclerosis; osteopetrosis; metastatic carcinoma; acute leukaemia;
XX multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
XX Niemann-Pick disease; Letterer-Siwe disease;
XX refractory erythroblastic anaemia; Di Guglielmo syndrome;
XX congestive splenomegaly; Kala awar; sarcoidosis;
XX primary splenic pancytopenia; fulminating septicaemia; malaria;
XX disseminated fungus disease; folic acid deficiency; pyridoxine deficiency;
XX vitamin B12 deficiency; hypopigmentation disorder; piebaldism;
XX Diamond Blackfan anaemia; hypopigmentation disorder; intestinal damage;
XX vitiligo; neurological damage; infertility; intestinal damage;
XX irradiation; chemotherapy; AIDS; haematopoietic recovery;
XX acute blood loss; neoplasm; cancer; ss; PCR; primer.
XX
XX Mammalia.
OS
XX US6759215-B1.
PN
XX 06-JUL-2004.
XX
XX 07-AUG-2000; 2000US-00635251.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537199.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX 21-DEC-1993; 93US-00172329.
XX 24-MAY-1995; 95US-00449182.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2004-497128/47.
XX
XX Preparing a human stem cell factor (SCF) polypeptide, useful for treating
XX hematopoietic disorders, e.g., aplastic anemia, comprises growing host
XX cells transformed or transfected with DNA encoding a human SCF.
XX
XX Example 3; SEQ ID NO 32; 210pp; English.
XX
XX The invention relates to preparing a (vertebrate) human stem cell factor
XX (SCF) polypeptide comprising growing host cells transformed or
XX transfected with DNA encoding a human SCF that stimulates growth of
XX hematopoietic progenitor cells under nutrient conditions, the DNA being
XX operatively linked to an expression control sequence, and isolating the
XX polypeptide produced. Also included is a recombinant host cell
XX transformed or transfected with an expression construct comprising a
XX vertebrate SCF polypeptide-encoding DNA operatively linked to a
XX heterologous expression regulatory sequence, permitting the expression of
XX the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat
XX and human nucleic acids encoding SCF, SCF proteins from a number of other
XX mammals and recombinantly expressed SCF protein fragments. The DNA
XX sequences are useful for effecting the large scale synthesis of SCF by a
XX variety of recombinant techniques or for generating new and useful viral
XX and circular plasmid DNA vectors, new and useful transformed and
XX transfected prokaryotic and eukaryotic host cells, and new and useful
XX methods for cultured growth of such host cells capable of expression of
XX SCF and its related products. The DNA sequences are also useful as
XX labelled probes in isolating human genomic DNA encoding SCF, in methods
XX of protein synthesis, in genetic therapy in humans and other mammals, and
XX in developing transgenic mammalian species which may serve as eukaryotic
XX hosts for production of SCF and SCF products in quantity. The SCF is
XX useful for treating haematopoietic disorders, e.g., aplastic anaemia,
XX osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
XX Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
XX syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
XX splenic pancytopenia, malaria, vitamin B 12 and folic acid deficiency,
XX pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
XX disorders such as piebaldism and vitiligo. The SCF are also useful for
XX treating neurological damage, infertility states, intestinal damage
XX resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
XX for enhancing haematopoietic recovery after acute blood loss and as a
XX boost to the immune system for fighting neoplasia (cancer). The present
XX sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
XX

```


anaemia; bone marrow during transplant; bone marrow aplasia; myelosuppression; immune deficiency; neoplasm; nerve damage; infertility; intestinal damage; myeloproliferative disorder;
 KW early haematopoietic progenitor cell; haematopoietic disorders;
 KW aplastic anaemia; myelofibrosis; myeloclerosis; osteopetrosis;
 KW metastatic carcinoma; multiple myeloma; Hodgkin's disease; lymphoma;
 KW Gaucher's disease; Niemann-Pick disease; Diamond-Blackfan anaemia; DBA; Fanconi's anaemia; gene therapy; acute blood loss; ss; PCR; primer; probe.
 KW
 XX Homo sapiens.
 OS Rattus norvegicus.
 OS
 XX US2004181044-A1.
 PN
 XX 16-SEP-2004.
 PD
 XX 19-JUN-2002; 2002US-00175608.
 PF
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 07-JUN-1995; 95US-00486546.
 PR 07-AUG-2000; 2000US-00635249.
 XX
 PA (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSelman R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 PI WPI; 2004-707481/69.
 XX
 XX Novel stem cell factor (SCF) such as non-naturally-occurring SCF or naturally occurring SCF, useful for treating leukopenia,
 PT thrombocytopenia, anemia, and enhancing engraftment of bone marrow during transplantation.
 PT
 XX Example 3; SEQ ID NO 32; 216pp; English.
 PS
 XX The invention relates to a stem cell factor (SCF) such as non-naturally-occurring SCF having an amino acid sequence sufficiently duplicative of that of naturally occurring SCF to allow possession of a haematopoietic biological activity of naturally occurring stem cell factor, or naturally occurring SCF. Also included are an isolated DNA sequence for use in securing expression in a prokaryotic or eukaryotic host cell of non-naturally occurring SCF, a prokaryotic or eukaryotic host cell transformed or transfected with the DNA, a polypeptide product of the expression of the DNA in a prokaryotic or eukaryotic host cell, an isolated DNA sequence coding for prokaryotic or eukaryotic host expression of non-naturally occurring SCF, a DNA sequence coding for a polypeptide fragment or polypeptide analogue of naturally-occurring stem cell factor, a biologically functional plasmid or viral DNA vector including the DNA sequence above, a prokaryotic or eukaryotic host cell stably transformed or transfected with the DNA, a polypeptide having part or all of amino acid sequence encoded by composite nucleic acid sequence of human SCF cDNA, human SCF cDNA sequence obtained from Hri080 fibrosarcoma cell line, or human SCF cDNA obtained from 5637 bladder carcinoma cell line (and having one or more of in vitro biological activity of naturally-occurring stem cell factor, and an antibody (Ab) specifically binding SCF. SCF is useful for treating leukopenia, thrombocytopenia, anemia, and enhancing engraftment of bone marrow during transplantation in a mammal. SCF is useful or chemotherapeutic induced recovery in treatment of radiation, chemical, or chemotherapeutic induced bone marrow aplasia or myelosuppression which involves treating patients with therapeutically effective doses of SCF. SCF is useful for treating acquired immune deficiency, neoplasia, nerve damage, infertility, intestinal damage, and a myeloproliferative disorder. SCF is useful for

transfecting early haematopoietic progenitor cells with a gene which involves culturing early haematopoietic progenitor cells with SCF, and transfecting the cultured cells with a gene. SCF is useful for transfecting a gene to a mammal which involves culturing early haematopoietic progenitor cells with SCF, transfecting the cultured cells with a gene, and administering the cultured cell to the mammal. SCF is useful for treating various haematopoietic disorders, aplastic anaemia, myelofibrosis, myeloclerosis, osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease, Diamond-Blackfan anaemia (DBA), Fanconi's anaemia. SCF is useful for enhancing the efficiency of gene therapy, for enhancing haematopoietic recovery after acute blood loss. The present sequence is a primer and/or probe used in the isolation of SCF nucleic acids.
 CC Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 XX
 QY 2707 CTAAAAA 0.7%; Score 18.4; DB 1; Length 20;
 Db 20 CCAAAAA 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 RESULT 956
 ADW93077/c
 ID ADW93077 standard; DNA; 20 BP.
 XX
 AC ADW93077;
 XX
 DT 21-APR-2005 (first entry)
 XX
 DE Universal Stem Cell Factor PCR primer 220-3, SEQ ID 32.
 KW Antianemic; Antiemetic; Cytostatic; Anti-HIV; Cardiovascular-Gen.;
 KW CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive;
 KW Antinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia;
 KW paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia;
 KW multiple myeloma; hodgkins disease; lymphoma; gauchers disease;
 KW niemann pick disease; sarcoidosis; plasmodium infection;
 KW vitamin deficiency; hypopigmentation; vitiligo; infertility;
 KW chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR;
 KW primer; ss.
 XX
 XX Synthetic.
 OS
 XX US6852313-B1.
 PN
 XX 08-FEB-2005.
 PD
 XX 26-JUN-2000; 2000US-00604325.
 PF
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449649.
 XX
 XX (AMGE-) AMGEN INC.
 PA
 XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 PI WPI; 2005-160562/17.
 XX
 XX Stimulating proliferation of melanocyte cells in human, involves
 PT administering stem cell factor polypeptide or its biologically active
 PT fragments stimulating growth of melanocyte cells, and optionally carrier,
 PT to human.

```

XX Example 3; SEQ ID NO 32; 212pp; English.
XX
CC The present invention relates to a method (M1) for stimulating
CC proliferation of melanocyte cells in a human. (M1) involves administering
CC a Stem Cell Factor (SCF) protein, or its biologically active fragments
CC that stimulates growth of melanocyte cells, and optionally a carrier, to
CC the human. The SCF is covalently conjugated to a water soluble polymer
CC e.g. polyethylene glycol. Also, the SCF is co-administered with one or
CC more other cytokines. SCF is also able to stimulate the growth of
CC primitive progenitors such as early hematopoietic progenitor cells that
CC are capable of maturing to erythroid, megakaryocyte, granulocyte, and
CC lymphocyte and macrophage cells, and non-hematopoietic stem cells such as
CC neural stem cells and primordial germ stem cells. (M1) is useful in
CC accelerating bone marrow regeneration, and in augmenting T cell
CC production. (M1) is useful for treating stem cells disorders that are
CC characterized by a reduction in functional marrow mass due to toxic,
CC radiat or immunological injury. (M1) is useful in treating AIDS,
CC aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
CC myelosclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
CC -Pick disease, congestive splenomegaly, Kalaazar, sarcoidosis, primary
CC splenic pancytopenia, disseminated fungus disease, fulminating
CC pyridoxine deficiency disease, and hypopigmentation disorders such as
CC piebaldism and vitiligo. (M1) is useful in treating infertility states,
CC intestinal damage resulting from irradiation or chemotherapy, and stem
CC cell myeloproliferative disorders such as chronic myelogenous leukemia,
CC primary thrombocythemia and acute leukemia. (M1) is useful in expanding
CC early hematopoietic progenitors in syngeneic, allogeneic or autologous
CC bone marrow transplantation, and in enhancing the efficacy of gene
CC therapy. The present sequence is a PCR primer used in an example from the
CC invention for cloning SCF.
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
RESULT 957
ADW93079/c
ID ADW93079 standard; DNA; 20 BP.
XX ADW93079;
AC ADW93079;
XX
XX 21-APR-2005 (first entry)
XX
XX Universal Stem Cell Factor PCR primer 220-11, SEQ ID 34.
XX
XX Antianemic; Antimetabolic; Cytostatic; Anti-HIV; Cardiovascular-Gen.;
XX CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive;
XX Antiinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia;
XX paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia;
XX multiple myeloma; hodgkins disease; lymphoma; gauchers disease;
XX niemann pick disease; sarcoidosis; plasmodium infection;
XX vitamin deficiency; hypopigmentation; vitiligo; infertility;
XX chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR;
XX primer; ss.
XX
XX Synthetic.
XX
XX US6852313-B1.
XX
XX 08-FEB-2005.
XX
XX 26-JUN-2000; 2000US-00604325.
XX

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PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449649.
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2005-160562/17.
XX
XX Stimulating proliferation of melanocyte cells in human, involves
XX administering stem cell factor polypeptide or its biologically active
XX fragments stimulating growth of melanocyte cells, and optionally carrier,
XX to human.
XX
XX Example 3; SEQ ID NO 34; 212pp; English.
XX
XX The present invention relates to a method (M1) for stimulating
XX proliferation of melanocyte cells in a human. (M1) involves administering
XX a Stem Cell Factor (SCF) protein, or its biologically active fragments
XX that stimulates growth of melanocyte cells, and optionally a carrier, to
XX the human. The SCF is covalently conjugated to a water soluble polymer
XX e.g. polyethylene glycol. Also, the SCF is co-administered with one or
XX more other cytokines. SCF is also able to stimulate the growth of
XX primitive progenitors such as early hematopoietic progenitor cells that
XX are capable of maturing to erythroid, megakaryocyte, granulocyte,
XX lymphocyte and macrophage cells, and non-hematopoietic stem cells such as
XX neural stem cells and primordial germ stem cells. (M1) is useful in
XX accelerating bone marrow regeneration, and in augmenting T cell
XX production. (M1) is useful for treating stem cells disorders that are
XX characterized by a reduction in functional marrow mass due to toxic,
XX radiat or immunological injury. (M1) is useful in treating AIDS,
XX aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
XX myelosclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
XX multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, Niemann
XX -Pick disease, congestive splenomegaly, Kalaazar, sarcoidosis, primary
XX splenic pancytopenia, disseminated fungus disease, fulminating
XX pyridoxine deficiency disease, and hypopigmentation disorders such as
XX piebaldism and vitiligo. (M1) is useful in treating infertility states,
XX intestinal damage resulting from irradiation or chemotherapy, and stem
XX cell myeloproliferative disorders such as chronic myelogenous leukemia,
XX primary thrombocythemia and acute leukemia. (M1) is useful in expanding
XX early hematopoietic progenitors in syngeneic, allogeneic or autologous
XX bone marrow transplantation, and in enhancing the efficacy of gene
XX therapy. The present sequence is a PCR primer used in an example from the
XX invention for cloning SCF.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
RESULT 958
ADZ47531/c
ID ADZ47531 standard; DNA; 20 BP.
XX ADZ47531;
XX
XX 30-JUN-2005 (first entry)
XX
XX Universal PCR primer, 220-11, SEQ ID NO: 34.

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XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2005-796179/81.
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
XX
XX Example 3; SEQ ID NO 34; 217pp; English.
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAAAA 2726
Db 20 CGAAAAA 1
RESULT 963
AEE01382/c
ID AEE01382 standard; DNA; 20 BP.
XX
AC AEE01382;
XX
XX 26-JAN-2006 (first entry)
XX
XX Universal oligonucleotide SEQ ID NO:32.
DE
XX antibody; stem cell factor; probe; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US2005261175-A1.
PN
XX 24-NOV-2005.
PD
XX
XX 28-JAN-2003; 2003US-00353783.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR

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PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00448729.
PR 21-AUG-2000; 2000US-00643659.
XX
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2005-796179/81.
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
XX
XX Example 3; SEQ ID NO 32; 217pp; English.
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAAAA 2726
Db 20 CCAAAAA 1
RESULT 964
AEE60694/c
ID AEE60694 standard; DNA; 20 BP.
XX
AC AEE60694;
XX
XX 09-FEB-2006 (first entry)
XX
XX Universal stem cell factor PCR primer SEQ ID NO:32.
DE
XX hematopoiesis; stem cell factor; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US6967029-B1.
PN
XX 22-NOV-2005.
PD

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XX PF 21-AUG-2000; 2000US-00643659.
XX
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX 21-DEC-1993; 93US-00172329.
XX 24-MAY-1995; 95US-00449649.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2006-053612/06.
XX
XX Enhancing hematopoiesis in human, comprises expanding hematopoietic
XX progenitor cells by adding stem cell factor polypeptide to cells and
XX administering expanded cells to human.
XX
XX Example 3; SEQ ID NO 32; 213pp; English.
XX
XX The invention relates to a method (M1) for enhancing hematopoiesis in a
XX human or other subject. (M1) comprises: (a) obtaining hematopoietic
XX progenitor cells from the human or other subject; (b) expanding the cells
XX obtained in step (a) by adding to the cell a stem cell factor (SCF)
XX polypeptide having a 195, 208 or 245 amino acid sequence of ABE60706,
XX ABE60708 or ABE60725, or its biological active fragments that stimulate
XX growth of hematopoietic progenitor cells; and (c) administering to the
XX human or other subject the expanded hematopoietic progenitor cells
XX obtained in step (b), therefore restoring hematopoiesis to and enhancing
XX hematological recovery in the human or other subject and enhancing
XX hematopoiesis in the human or other subject. Also described is a method
XX (M2) for expanding hematopoietic progenitor cells ex vivo, which
XX comprises: (a) obtaining hematopoietic progenitor cells from a donor; and
XX (b) expanding the cells obtained in step (a) by adding to the cells the
XX SCF polypeptide or its biological active fragments. (M1) is useful for
XX enhancing hematopoiesis in a human or other subject. (M2) is useful for
XX expanding hematopoietic progenitor cells, where the hematopoietic cells
XX are chosen from stem cells, lymphoid progenitor cells, myeloid progenitor
XX cells, megakaryocytes and erythroblasts. (M1) is useful for treating
XX various stem cell deficiencies such as aplastic anemia, paroxymal
XX nocturnal hemoglobinuria, myelofibrosis, myeloclerosis, Gaucher's
XX disease, Niemann-Pick disease, Hodgkin's disease, Kala-azar, sarcoidosis,
XX disseminated fungus disease, fulminating septicemia, malaria, vitamin
XX B12, and folic acid deficiency, pyridoxine deficiency, Diamond blackfan
XX anemia, hypopigmentation disorders such as piebaldism and vitiligo, and
XX AIDS. (M2) is useful in expanding early hematopoietic progenitors in
XX syngeneic, allogeneic or autologous bone marrow transplantation. (M1)
XX enhances hematopoiesis by expanding early hematopoietic progenitors. The
XX present sequence represents a universal PCR primer for SCF, which is used
XX in an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
XX
RESULT 965
ABE60696/c
ID ABE60696 standard; DNA; 20 BP.
XX
AC ABE60696;
XX
XX 09-FEB-2006 (first entry)

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XX DE 21-AUG-2000; 2000US-00643659.
XX
XX
XX KW Universal stem cell factor PCR primer SEQ ID NO:34.
XX
XX hematopoiesis; stem cell factor; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US6967029-B1.
XX
XX 22-NOV-2005.
XX
XX 21-AUG-2000; 2000US-00643659.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX 21-DEC-1993; 93US-00172329.
XX 24-MAY-1995; 95US-00449649.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2006-053612/06.
XX
XX Enhancing hematopoiesis in human, comprises expanding hematopoietic
XX progenitor cells by adding stem cell factor polypeptide to cells and
XX administering expanded cells to human.
XX
XX Example 3; SEQ ID NO 34; 213pp; English.
XX
XX The invention relates to a method (M1) for enhancing hematopoiesis in a
XX human or other subject. (M1) comprises: (a) obtaining hematopoietic
XX progenitor cells from the human or other subject; (b) expanding the cells
XX obtained in step (a) by adding to the cell a stem cell factor (SCF)
XX polypeptide having a 195, 208 or 245 amino acid sequence of ABE60706,
XX ABE60708 or ABE60725, or its biological active fragments that stimulate
XX growth of hematopoietic progenitor cells; and (c) administering to the
XX human or other subject the expanded hematopoietic progenitor cells
XX obtained in step (b), therefore restoring hematopoiesis to and enhancing
XX hematological recovery in the human or other subject and enhancing
XX hematopoiesis in the human or other subject. Also described is a method
XX (M2) for expanding hematopoietic progenitor cells ex vivo, which
XX comprises: (a) obtaining hematopoietic progenitor cells from a donor; and
XX (b) expanding the cells obtained in step (a) by adding to the cells the
XX SCF polypeptide or its biological active fragments. (M1) is useful for
XX enhancing hematopoiesis in a human or other subject. (M2) is useful for
XX expanding hematopoietic progenitor cells, where the hematopoietic cells
XX are chosen from stem cells, lymphoid progenitor cells, myeloid progenitor
XX cells, megakaryocytes and erythroblasts. (M1) is useful for treating
XX various stem cell deficiencies such as aplastic anemia, paroxymal
XX nocturnal hemoglobinuria, myelofibrosis, myeloclerosis, Gaucher's
XX disease, Niemann-Pick disease, Hodgkin's disease, Kala-azar, sarcoidosis,
XX disseminated fungus disease, fulminating septicemia, malaria, vitamin
XX B12, and folic acid deficiency, pyridoxine deficiency, Diamond blackfan
XX anemia, hypopigmentation disorders such as piebaldism and vitiligo, and
XX AIDS. (M2) is useful in expanding early hematopoietic progenitors in
XX syngeneic, allogeneic or autologous bone marrow transplantation. (M1)
XX enhances hematopoiesis by expanding early hematopoietic progenitors. The
XX present sequence represents a universal PCR primer for SCF, which is used
XX in an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
XX
RESULT 965
ABE60696/c
ID ABE60696 standard; DNA; 20 BP.
XX
AC ABE60696;
XX
XX 09-FEB-2006 (first entry)

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Db      20 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 966
AEF16083/c
ID AEF16083 standard; DNA; 20 BP.
XX
AC AEF16083;
XX
DT 09-MAR-2006 (first entry)
XX
DE Transcription modulation-related plant promoter DNA sequence SeqID71.
XX
KW plant; promoter; DNA purification; gene expression; crop improvement;
XX transcription; ds.
XX
OS Viridiplantae.
XX
PN US2006008816-A1.
XX
PD 12-JAN-2006.
XX
PF 04-NOV-2004; 2004US-00981334.
XX
PR 06-NOV-2003; 2003US-0518075P.
XX 04-DEC-2003; 2003US-0527611P.
XX
PA (LUJY/) LU Y.
PA (PENN/) PENNELL R.
PA (OKAM/) OKAMURO J.
PA (SCHN/) SCHNEEBERGER R.
PA (FANG/) FANG Y.
PA (KWOK/) KWOK S.
XX
PI Lu Y, Pennell R, Okamuro J, Schneeberger R, Fang Y, Kwok S;
XX WPI; 2006-088582/09.
XX
PT New isolated nucleic acid molecule capable of modulating transcription,
XX useful for identifying promoters, control elements, or fragments to
XX modulate transcript levels in plants.
XX
PS Claim 1; SEQ ID NO 71; 126pp; English.
XX
CC This invention relates to a novel isolated nucleic acid molecule capable
XX of modulating transcription, where the nucleic acid molecule shows at
XX least 80 % sequence identity to a sequence listed in Table 1 of the
XX specification (or its complement). The nucleic acid molecule is useful
XX for identifying promoters, control elements, or fragments to modulate
XX transcript levels in plants. The present sequence is that of a plant
XX promoter DNA sequence of the invention (derived from either Arabidopsis
XX thaliana or Oryza sativa, but not clearly stated in the specification)
XX which is claimed as being capable of modulating transcription.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 2 Other;

Query Match      0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 8.6e+02;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAAA 2727
       :|||||
Db      20 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 967
AAQ75752/c
ID AAQ75752 standard; DNA; 21 BP.
XX
AC AAQ75752;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.

Reverse transcription primer used in cDNA analysis technique.
Analysis; gene expression; reverse transcription; primer; cDNA;
aggregate; restriction enzyme; ss.
Synthetic.
JP06303997-A.
01-NOV-1994.
16-APR-1993; 93JP-00112515.
16-APR-1993; 93JP-00112515.
(NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
WPI; 1995-018287/03.
Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.

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XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2726
DB 20 CTCAAAAAA 1

RESULT 969
AAQ75676/c
ID AAQ75676 standard; DNA; 21 BP.
XX AC AAQ75676;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX DT
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 7; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAACAAAAA 2727
DB 20 TATAAAAAA 1

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RESULT 970
AAQ75719/c
ID AAQ75719 standard; DNA; 21 BP.
XX AC AAQ75719;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX DT
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2726
DB 20 CTCAAAAAA 1

RESULT 971
AAQ75778/c
ID AAQ75778 standard; DNA; 21 BP.
XX AC AAQ75778;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX DT
XX DT

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PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 972
XX AAQ75618/c
XX ID AAQ75618 standard; DNA; 21 BP.
XX
XX AC AAQ75618;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily

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XX SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
DB 20 ACCAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 973
XX AAQ75729/c
XX ID AAQ75729 standard; DNA; 21 BP.
XX
XX AC AAQ75729;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) .
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
DB 20 ATTAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 974
XX AAQ75730/c
XX ID AAQ75730 standard; DNA; 21 BP.
XX
XX AC AAQ75730;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.

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RESULT 977
AAQ75650/c
ID AAQ75650 standard; DNA; 21 BP.
XX AC AAQ75650;
XX AC AAQ75650;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
PN 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 978
AAQ75682/c
ID AAQ75682 standard; DNA; 21 BP.
XX AC AAQ75682;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
PN 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 979
AAQ75678/c
ID AAQ75678 standard; DNA; 21 BP.
XX AC AAQ75678;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
PN 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
Db 20 AATAAAAAAAAAAAAAAAAAAAAAA 1

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XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
Db 20 AATAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 979
AAQ75678/c
ID AAQ75678 standard; DNA; 21 BP.
XX AC AAQ75678;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
PN 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
Db 20 AATAAAAAAAAAAAAAAAAAAAAAA 1

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XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAA 2725
Db 20 ACGAAAAA 1
XX
RESULT 983
AAQ75722/c
ID AAQ75722 standard; DNA; 21 BP.
XX AC AAQ75722;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTTAAAAA 2726
Db 20 CTTAAAAA 1
XX
RESULT 984
AAQ75775/c
ID AAQ75775 standard; DNA; 21 BP.
XX AC AAQ75775;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAA 2728
Db 20 AAAAAA 1
XX
RESULT 985
AAQ75697/c
ID AAQ75697 standard; DNA; 21 BP.
XX AC AAQ75697;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX
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PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACGAAAAA 1

RESULT 986
AAQ75746/c
XX ID AAQ75746 standard; DNA; 21 BP.
XX AC AAQ75746;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PP 16-APR-1993; 93JP-00112515.
XX PR (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PA
XX DR WPI; 1995-018287/03.
XX DE Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

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Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACGAAAAA 1

RESULT 987
AAQ75617/c
XX ID AAQ75617 standard; DNA; 21 BP.
XX AC AAQ75617;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PP 16-APR-1993; 93JP-00112515.
XX PR (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PA
XX DR WPI; 1995-018287/03.
XX DE Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 988
AAQ75624/c
XX ID AAQ75624 standard; DNA; 21 BP.
XX AC AAQ75624;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;

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Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
 ||| ||||| ||||| ||||| |||||
 Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 994
 AAQ75644/c
 ID AAQ75644 standard; DNA; 21 BP.

XX AC AAQ75644;

XX DT 04-AUG-1995 (first entry)

XX DE Reverse transcription primer used in cDNA analysis technique.

XX XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX OS Synthetic.

XX PN JP06303997-A.

XX PD 01-NOV-1994.

XX PF 16-APR-1993; 93JP-00112515.

XX PR 16-APR-1993; 93JP-00112515.

XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX DR WPI; 1995-018287/03.

XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX PS Disclosure; Page 6; 11pp; Japanese.

XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAAATAAAAAAAAA 2724
 ||| ||||| ||||| ||||| |||||
 Db 20 TACAAAAAATAAAAAAAAAA 1

RESULT 995
 AAQ75679/c
 ID AAQ75679 standard; DNA; 21 BP.

XX AC AAQ75679;

XX DT 04-AUG-1995 (first entry)

XX DE Reverse transcription primer used in cDNA analysis technique.

XX XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX OS Synthetic.
 XX PN JP06303997-A.

XX PD 01-NOV-1994.

XX PF 16-APR-1993; 93JP-00112515.

XX PR 16-APR-1993; 93JP-00112515.

XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX DR WPI; 1995-018287/03.

XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX PS Disclosure; Page 7; 11pp; Japanese.

XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAA 2725
 ||| ||||| ||||| ||||| |||||
 Db 20 AATAAAAAAATAAAAAAAAAA 1

RESULT 996

AAQ75774/c
 ID AAQ75774 standard; DNA; 21 BP.

XX AC AAQ75774;

XX DT 04-AUG-1995 (first entry)

XX DE Reverse transcription primer used in cDNA analysis technique.

XX XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX OS Synthetic.

XX PN JP06303997-A.

XX PD 01-NOV-1994.

XX PF 16-APR-1993; 93JP-00112515.

XX PR 16-APR-1993; 93JP-00112515.

XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX DR WPI; 1995-018287/03.

XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX PS Disclosure; Page 9; 11pp; Japanese.

XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 XX Disclosure; Page 9; l1pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. NO. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 DB 20 TAGAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1000
 AAQ75647/c
 ID AAQ75647 standard; DNA; 21 BP.
 XX AC AAQ75647;
 XX
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; l1pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. NO. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 DB 20 CTTAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1002
 ADK01318/c
 ID ADK01318 standard; DNA; 21 BP.
 XX AC ADK01318;
 XX
 XX 06-MAY-2004 (first entry)
 DT Rat DNA microarray capture oligonucleotide #38.
 DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 KW
 XX

Best Local Similarity 95.0%; Pred. NO. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AACAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1001
 AAQ75720/c
 ID AAQ75720 standard; DNA; 21 BP.
 XX AC AAQ75720;
 XX
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; l1pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. NO. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 DB 20 CTTAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1002
 ADK01318/c
 ID ADK01318 standard; DNA; 21 BP.
 XX AC ADK01318;
 XX
 XX 06-MAY-2004 (first entry)
 DT Rat DNA microarray capture oligonucleotide #38.
 DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 KW
 XX

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OS      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX      Example; Page 5; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)
XX      comprise variable and non-variable regions. The capture oligonucleotides
XX      have a 5'-invariable anchor region, the complement of which is present at
XX      least once in each nucleic acid and a 3'-variable, discriminatory region
XX      that comprises all possible combinations of up to 10 nucleotides to allow
XX      binding of particular sorts of single stranded nucleic acids. The capture
XX      agents are particularly locked nucleic acids (LNA) and the anchor region
XX      comprises a sequence of 10-50, particularly 15-25, T residues. The
XX      capture oligonucleotides are biotinylated and immobilised on a surface by
XX      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX      metal, resin, gel, crystalline material and/or membrane, having semi-
XX      conducting properties and especially in the form of a chip. Its surface
XX      is particularly a layer of (bio)molecular filaments and binding of single
XX      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX      physical, stimulated by an electrical field or through a molecular sieve.
XX      The method is used (i) for analysis of patterns, especially in mucosal,
XX      hair root, blood, nerve or germ cells and (ii) for determining the
XX      activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX      additives or supplements, especially minerals, trace elements, organic
XX      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX      mixtures. The method provides rapid, inexpensive and reproducible
XX      representation of differences in pools of nucleic acids from cells. It
XX      allows imaging of the complete pattern of all nucleic acids in a cell, and
XX      can detect very small differences in the nucleic acid pool. Since the
XX      method is based on comparison of nucleic acid pools, not individual
XX      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX      capture probes used in the method of the invention.
XX      Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX      Query Match      0.7%; Score 18.4; DB-1; Length 21;
XX      Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX      Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2707 CTAAGAAAAA 2726
DB      20 CGAAAAA 1

RESULT 1003
ADK01313/c
ID      ADK01313 standard; DNA; 21 BP.
XX      ADK01313;
XX      06-MAY-2004 (first entry)
XX      Rat DNA microarray capture oligonucleotide #33.

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XX      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX      blood; nerve; germ cell; food additive; food supplement.
XX      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX      Example; Page 5; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)
XX      comprise variable and non-variable regions. The capture oligonucleotides
XX      have a 5'-invariable anchor region, the complement of which is present at
XX      least once in each nucleic acid and a 3'-variable, discriminatory region
XX      that comprises all possible combinations of up to 10 nucleotides to allow
XX      binding of particular sorts of single stranded nucleic acids. The capture
XX      agents are particularly locked nucleic acids (LNA) and the anchor region
XX      comprises a sequence of 10-50, particularly 15-25, T residues. The
XX      capture oligonucleotides are biotinylated and immobilised on a surface by
XX      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX      metal, resin, gel, crystalline material and/or membrane, having semi-
XX      conducting properties and especially in the form of a chip. Its surface
XX      is particularly a layer of (bio)molecular filaments and binding of single
XX      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX      physical, stimulated by an electrical field or through a molecular sieve.
XX      The method is used (i) for analysis of patterns, especially in mucosal,
XX      hair root, blood, nerve or germ cells and (ii) for determining the
XX      activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX      additives or supplements, especially minerals, trace elements, organic
XX      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX      mixtures. The method provides rapid, inexpensive and reproducible
XX      representation of differences in pools of nucleic acids from cells. It
XX      allows imaging of the complete pattern of all nucleic acids in a cell, and
XX      can detect very small differences in the nucleic acid pool. Since the
XX      method is based on comparison of nucleic acid pools, not individual
XX      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX      capture probes used in the method of the invention.
XX      Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX      Query Match      0.7%; Score 18.4; DB 1; Length 21;
XX      Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX      Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2708 TAAAGAAAAA 2727
DB      20 TGAAGAAAAA 1

RESULT 1004
ADK01319/c
ID      ADK01319 standard; DNA; 21 BP.
XX      ADK01319;

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XX 06-MAY-2004 (first entry)
DT Rat DNA microarray capture oligonucleotide #39.
DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
KW Rattus sp.
OS DE10208794-A1.
XX 04-SEP-2003.
XX 28-FEB-2002; 2002DE-01008794.
XX 28-FEB-2002; 2002DE-01008794.
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX Example; Page 5; 8pp; German.
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DB 20 CGAAAAA 1
RESULT 1005
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ADK01297/c
ID ADK01297 standard; DNA; 21 BP.
XX AC ADK01297;
XX 06-MAY-2004 (first entry)
XX DT Rat DNA microarray capture oligonucleotide #17.
XX DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX DE10208794-A1.
XX 04-SEP-2003.
XX 28-FEB-2002; 2002DE-01008794.
XX 28-FEB-2002; 2002DE-01008794.
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX Example; Page 5; 8pp; German.
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAA 2727
DB 20 CGAAAAA 1
RESULT 1005
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CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
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 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1010

ADK01316/c

ID ADK01316 standard; DNA; 21 BP.

XX AC ADK01316;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #36.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp B, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

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 XX and constant regions.

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 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,

CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
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 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727

Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1011

ADK01299/c

ID ADK01299 standard; DNA; 21 BP.

XX AC ADK01299;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #19.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

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 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
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 CC representation of differences in pools of nucleic acids from cells. It
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 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

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Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727

Db 20 TGAIAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1014

ADK01326/C

ID ADK01326 standard; DNA; 21 BP.

AC ADK01326;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #46.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

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 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1015

ADK01300/C

ID ADK01300 standard; DNA; 21 BP.

AC ADK01300;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #20.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

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XX Example; Page 5; 8pp; German.

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 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727

DB 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1016

ADK01310/c

ID ADK01310 standard; DNA; 21 BP.

XX ADK01310;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #30.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

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XX Example; Page 5; 8pp; German.

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 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2725

DB 20 ACAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1017

ADK01311/c

ID ADK01311 standard; DNA; 21 BP.

XX ADK01311;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #31.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.
 XX
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 XX
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 SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2706 ACTAATAAAAAAAAAAAAAA 2725
 Db ||||||||||||||||
 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1018
 ABA93238
 ID ABA93238 standard; DNA; 22 BP.
 XX
 AC ABA93238;
 XX
 DT 18-APR-2002 (first entry)
 XX
 DE PolyA adaptor oligonucleotide SEQ ID NO:1.
 XX
 KW Detection; comparative detection; adaptor; ss.
 XX
 OS Synthetic.
 XX
 PN JP2001333800-A.
 XX
 PD 04-DEC-2001.
 XX
 PF 30-MAY-2000; 2000JP-00160324.
 XX
 PR 30-MAY-2000; 2000JP-00160324.
 XX

PA (UNIT-) UNITECH CO LTD.
 XX
 DR WPI; 2002-135950/18.
 XX
 PT Comparative detection of the amounts of RNA and DNA.
 XX
 PS Disclosure; Page 9; 9pp; Japanese.
 XX
 CC The present invention describes a method for the comparative detection of
 CC the amount of an RNA. The method comprises: (a) cDNAs obtained by
 CC transcribing respectively from at least two tissue RNAs are respectively
 CC fragmented by using a same restriction enzyme; (b) each different adaptor
 CC and a common adaptor are added to each of the cDNA fragments derived from
 CC the same or different tissues by the step (a); (c) the resultant adaptor-
 CC added cDNAs are mixed together; (d) an adaptor primer having the common
 CC sequence to said different adaptor and a gene-specific adaptor are used
 CC to amplify said adaptor-added cDNAs containing no region derived from
 CC polyadenylic acid of the mRNA before the addition of the adaptor among
 CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the
 CC cDNA amounts are measured between the tissues; (f) the RNA is detected
 CC from the measured result; (g) each different adaptor and a common adaptor
 CC are added to each of the genomic DNA fragments derived from a same or
 CC different individuals; (h) the resultant adaptor-added genomic DNAs are
 CC mixed together; (i) the adaptor-added genomic DNAs are amplified by using
 CC a adaptor primer having the common sequence to the different adaptor and
 CC a sequence-specific adaptor; and (j) the ratios of the amplified amounts
 CC of the genomic DNAs are measured between the individuals. The method is
 CC used for the detection of the amounts of RNA and DNA. The present
 CC sequence represents an oligonucleotide which is used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 22 BP; 19 A; 1 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 22;
 Best Local Similarity 95.0%; Pred. No. 9.e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAAAAAA 2727
 Db ||||||||||||||||
 3 TCAAAAAAAAAAAAAAAAAAAAAA 22
 RESULT 1019
 AAQ75028
 ID AAQ75028 standard; DNA; 23 BP.
 XX
 AC AAQ75028;
 XX
 DT 25-MAR-2003 (revised)
 DT 03-AUG-1995 (first entry)
 XX
 DE LCR oligo 2.
 XX
 KW Synthetic oligo; solid phase immunoassay; ss.
 XX
 OS Synthetic.
 XX
 PN WO9426932-A1.
 XX
 PD 24-NOV-1994.
 XX
 PF 13-MAY-1994; 94WO-US005407.
 XX
 PR 13-MAY-1993; 93US-00061694.
 XX
 PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 PI Fields HA, Khudyakov YE;
 XX
 DR WPI; 1995-006819/01.
 XX
 PT Solid phase immunoassay using oligo:nucleotide as label - also new
 PT conjugates of oligo:nucleotide coupled to antigenic peptide, partic. for

ID	Query Match	Best Local Similarity	Score	DB 1	Length	DB 2	DB 3	DB 4	DB 5	DB 6	DB 7	DB 8	DB 9	DB 10	DB 11	DB 12	DB 13	DB 14	DB 15	DB 16	DB 17	DB 18	DB 19	DB 20	DB 21	DB 22	DB 23	DB 24	DB 25	DB 26	DB 27	DB 28	DB 29	DB 30	DB 31	DB 32	DB 33	DB 34	DB 35	DB 36	DB 37	DB 38	DB 39	DB 40	DB 41	DB 42	DB 43	DB 44	DB 45	DB 46	DB 47	DB 48	DB 49	DB 50	DB 51	DB 52	DB 53	DB 54	DB 55	DB 56	DB 57	DB 58	DB 59	DB 60	DB 61	DB 62	DB 63	DB 64	DB 65	DB 66	DB 67	DB 68	DB 69	DB 70	DB 71	DB 72	DB 73	DB 74	DB 75	DB 76	DB 77	DB 78	DB 79	DB 80	DB 81	DB 82	DB 83	DB 84	DB 85	DB 86	DB 87	DB 88	DB 89	DB 90	DB 91	DB 92	DB 93	DB 94	DB 95	DB 96	DB 97	DB 98	DB 99	DB 100	DB 101	DB 102	DB 103	DB 104	DB 105	DB 106	DB 107	DB 108	DB 109	DB 110	DB 111	DB 112	DB 113	DB 114	DB 115	DB 116	DB 117	DB 118	DB 119	DB 120	DB 121	DB 122	DB 123	DB 124	DB 125	DB 126	DB 127	DB 128	DB 129	DB 130	DB 131	DB 132	DB 133	DB 134	DB 135	DB 136	DB 137	DB 138	DB 139	DB 140	DB 141	DB 142	DB 143	DB 144	DB 145	DB 146	DB 147	DB 148	DB 149	DB 150	DB 151	DB 152	DB 153	DB 154	DB 155	DB 156	DB 157	DB 158	DB 159	DB 160	DB 161	DB 162	DB 163	DB 164	DB 165	DB 166	DB 167	DB 168	DB 169	DB 170	DB 171	DB 172	DB 173	DB 174	DB 175	DB 176	DB 177	DB 178	DB 179	DB 180	DB 181	DB 182	DB 183	DB 184	DB 185	DB 186	DB 187	DB 188	DB 189	DB 190	DB 191	DB 192	DB 193	DB 194	DB 195	DB 196	DB 197	DB 198	DB 199	DB 200	DB 201	DB 202	DB 203	DB 204	DB 205	DB 206	DB 207	DB 208	DB 209	DB 210	DB 211	DB 212	DB 213	DB 214	DB 215	DB 216	DB 217	DB 218	DB 219	DB 220	DB 221	DB 222	DB 223	DB 224	DB 225	DB 226	DB 227	DB 228	DB 229	DB 230	DB 231	DB 232	DB 233	DB 234	DB 235	DB 236	DB 237	DB 238	DB 239	DB 240	DB 241	DB 242	DB 243	DB 244	DB 245	DB 246	DB 247	DB 248	DB 249	DB 250	DB 251	DB 252	DB 253	DB 254	DB 255	DB 256	DB 257	DB 258	DB 259	DB 260	DB 261	DB 262	DB 263	DB 264	DB 265	DB 266	DB 267	DB 268	DB 269	DB 270	DB 271	DB 272	DB 273	DB 274	DB 275	DB 276	DB 277	DB 278	DB 279	DB 280	DB 281	DB 282	DB 283	DB 284	DB 285	DB 286	DB 287	DB 288	DB 289	DB 290	DB 291	DB 292	DB 293	DB 294	DB 295	DB 296	DB 297	DB 298	DB 299	DB 300	DB 301	DB 302	DB 303	DB 304	DB 305	DB 306	DB 307	DB 308	DB 309	DB 310	DB 311	DB 312	DB 313	DB 314	DB 315	DB 316	DB 317	DB 318	DB 319	DB 320	DB 321	DB 322	DB 323	DB 324	DB 325	DB 326	DB 327	DB 328	DB 329	DB 330	DB 331	DB 332	DB 333	DB 334	DB 335	DB 336	DB 337	DB 338	DB 339	DB 340	DB 341	DB 342	DB 343	DB 344	DB 345	DB 346	DB 347	DB 348	DB 349	DB 350	DB 351	DB 352	DB 353	DB 354	DB 355	DB 356	DB 357	DB 358	DB 359	DB 360	DB 361	DB 362	DB 363	DB 364	DB 365	DB 366	DB 367	DB 368	DB 369	DB 370	DB 371	DB 372	DB 373	DB 374	DB 375	DB 376	DB 377	DB 378
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XX 16-AUG-2001 (first entry)
XX Mouse total gene expression analysis (TOGA) 3' sequencing primer SEQ:92.
DE Mouse; human; total gene expression analysis; TOGA; DST; EST;
XX digital sequence tag; expressed sequence tag; neuroleptic; antimanic;
KW central nervous system; antidepressant; gene therapy; diagnosis;
KW neuropsychiatric disorder; schizophrenia; bipolar disorder;
KW addition-related behaviour; chromosome identification; immune response;
KW PCR primer; probe; ss.
XX Mus musculus.
XX WO200130972-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029690.
XX 26-OCT-1999; 99US-0161379P.
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX Thomas EA, Sutcliffe JG, Pribyl TM, Hilbush B, Hasel KW;
XX WPI; 2001-300499/31.
XX New neuroleptic-regulated polynucleotides expressed in the central
PT nervous system for diagnosing and treating neuropsychiatric disorders
PT such as schizophrenia, bipolar disorder and addiction-related behavior.
XX Example 1; Page 87; 210pp; English.
XX The present invention describes isolated neuroleptic-regulated nucleic
CC acid molecules. (I) have neuroleptic, antimanic and antidepressant
CC activities, and can be used in gene therapy. (I), polypeptides (II)
CC encoded by (I), or a host cell (III) comprising (I), are useful for
CC preventing, treating, modulating or ameliorating a medical condition such
CC as a neuropsychiatric disorder. (I) are useful as diagnostic agents for
CC diagnosing a pathological condition or susceptibility to a pathological
CC condition such as neuropsychiatric disorder e.g. schizophrenia, a bipolar
CC disorder or addiction-related behaviour. (I) are useful for detecting the
CC presence of a nucleic acid encoding a protein in a mammalian tissue
CC sample. (I) can be used as probes and primers, for chromosome
CC identification, to control gene expression through triple helix formation
CC or antisense DNA or RNA, in gene therapy to treat the above mentioned
CC disorders, identifying individuals from minute biological samples, as an
CC alternative to restriction fragment length polymorphism (RFLP) and as
CC polymorphic markers for forensic purposes. (I) is also useful as
CC molecular weight markers on Southern gels, diagnostic probes for the
CC presence of specific mRNA in a particular cell type, as a probe to
CC subtract-out known sequences in the process of discovering novel
CC polynucleotides, for selecting and making oligomers for attachment to a
CC gene chip or other support, to raise anti-DNA antibodies using DNA
CC immunisation technique, and as an antigen to elicit an immune response.
CC AAH21877 to AAH21984, AAB98083 and AAB98084 represent sequences used in
CC the exemplification of the present invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAA.....AAAAA 2726
Db 19 BAAAAA.....AAAAA 1
RESULT 1025
AAF76617/c
ID AAF76617 standard; DNA; 19 BP.
```

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XX AAF76617;
XX 15-MAY-2001 (first entry)
XX Spearmint (-)-limonene-6-hydroxylase PCR primer SEQ ID NO: 18.
XX Spearmint; peppermint; (-)-limonene-6-hydroxylase;
KW (-)-limonene-3-hydroxylase; flavour; aroma; probe; PCR primer; ss.
XX Mentha spicata.
XX US6194185-B1.
XX 27-FEB-2001.
XX 14-APR-1999; 99US-00292768.
XX 24-JUN-1997; 97US-00881784.
XX (UNIW ) UNIV WASHINGTON STATE RES FOUND.
XX Croteau RB, Lupien SL, Karp F;
XX WPI; 2001-243405/25.
XX Novel isolated limonene hydroxylase encoding nucleic acid molecule,
PT useful for altering production of limonene-6-hydroxylase or limonene-3-
PT hydroxylase in suitable host cell.
XX Example 4; Col 55; 57pp; English.
XX The present invention provides the protein and coding sequences of the
CC peppermint and spearmint (-)-limonene-3-hydroxylase and the spearmint (-)
CC limonene-6-hydroxylase. Also provided are a number of probes and PCR
CC primers which were used to isolate the sequences. These are useful in the
CC production of transgenic plants with altered flavour and aroma
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAA.....AAAAA 2726
Db 19 DAAAAA.....AAAAA 1
RESULT 1026
AAS06525/c
ID AAS06525 standard; DNA; 19 BP.
XX AAS06525;
XX 07-SEP-2001 (first entry)
XX Mouse microglia and macrophage regulatory gene primer #60.
XX Mouse; microglia; macrophage; regulatory gene; digital sequence tag; DST;
KW PCR-based total gene expression analysis; TOGA; infectious disorder;
KW neuroinflammatory pathology; neurodegenerative disease; gene therapy;
KW hyperproliferative disorder; autoimmune; inflammatory disorder; primer;
XX ss.
XX Mus musculus.
XX WO200134770-A2.
XX 17-MAY-2001.
XX 06-NOV-2000; 2000WO-US030585.
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PR 12-NOV-1999; 99WO-US026824.
PR 03-MAR-2000; 2000US-0186770P.
PR 19-JUN-2000; 2000US-0212465P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Carson MJ, Sutcliffe JG, Almazan MT, Tobal GM;
XX
DR WPI; 2001-308782/32.
XX
PT New regulated genes of microglia and macrophages, useful for diagnosing,
PT preventing or treating neuroinflammatory pathology and neurodegenerative
PT disease.
XX
PS Example 1; Page 88; 244pp; English.
XX
CC The present sequence represents a primer used to isolate novel mouse
CC microglia and macrophage regulatory gene DST (digital sequences tag)
CC sequences. AAS06401-AAS06590 represent these novel sequences and the
CC primer sequences used to isolate them. The PCR-based total gene
CC expression analysis (TOGA) system is used to examine the expression
CC pattern of molecules corresponding to genes that are regulated in
CC unstimulated microglia. Activated microglia, unstimulated macrophage and
CC activated macrophage. The polynucleotides of the invention, the
CC polypeptides encoded by them and antibodies that bind to these
CC polypeptides are useful for the diagnosis, prevention,
CC treatment or amelioration of a medical condition, preferably a
CC neuroinflammatory pathology or a neurodegenerative disease such as
CC Alzheimer's disease, senile dementia, Parkinson's disease, obsessive
CC compulsive disorders, epilepsy, schizophrenia, multiple sclerosis,
CC depression and bipolar manic-depressive disorder. The sequences and
CC methods of the invention can also be used for detecting or treating
CC infectious disorders (e.g. AIDS), hyperproliferative disorders (e.g.
CC cancer), immune disorders (e.g. severe combined immunodeficiency, SCID)
CC autoimmune diseases (e.g. insulin dependent diabetes mellitus),
CC inflammatory disorders (e.g. arthritis). The polynucleotides can be used
CC for gene therapy
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
19 BAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 1027
ABK71509/c
ID ABK71509 standard; DNA; 19 BP.
XX
AC ABK71509;
XX
30-JUL-2002 (first entry)
XX
CNS related 3' sequencing primer.
XX
Central nervous system; CNS; neuroleptic; mouse; human; psychoses;
KW neuropsychiatric disorder; psychiatric disorder; Alzheimer's disease;
KW Pick's disease; Binswanger's disease; senile dementia; encephalopathy;
KW Parkinson's disease; obsessive compulsive disorder; epilepsy; ischaemia;
KW addiction; multiple sclerosis; depression; manic-depressive disorder;
KW primer; ss.
XX
OS Synthetic.
XX
WO200226936-A2.
PN
PD 04-APR-2002.
XX
01-OCT-2001; 2001WO-US030695.
PF

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XX 29-SEP-2000; 2000US-0236790P.
PR 18-JAN-2001; 2001US-0263084P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Thomas EA, Sutcliffe JG, Pribyl TW, Hilbush BS, Hasel KW;
XX
DR WPI; 2002-383271/41.
XX
PT New polynucleotide useful in gene therapy for preventing, treating
PT modulating or ameliorating a medical condition such as psychoses or a
PT neuro psychiatric disorder e.g. schizophrenia, or a bipolar disorder in a
PT mammal.
XX
PS Example 1; Page 40; 254pp; English.
XX
CC This invention relates to the cDNA sequences of novel isolated
CC polynucleotides associated with psychoses or other neuropsychiatric
CC disorders. The sequences of the invention may act as blockers of D 2
CC receptors in the meso-limbic dopamine system. The nucleotide sequences of
CC the invention and the polypeptides encoded by them are useful in the
CC manufacture of a medicament useful for preventing, treating, modulating
CC or ameliorating a medical condition e.g. a neuropsychiatric disorder. An
CC antibody that binds the proteins of the invention is useful for
CC preventing, treating, modulating or ameliorating neurological disorders
CC such as psychoses or other neuropsychiatric disorders in a subject. The
CC sequences are also useful for diagnosing neurological disorders or a
CC susceptibility to a neurological disorder such as psychoses and other
CC neuro psychiatric disorders in a subject by determining the presence or
CC absence of mutation in the nucleotide sequence of apolipoprotein D or by
CC determining the alteration (increase or decrease) in the expression of
CC apolipoprotein D. The sequences of the invention are useful in treating
CC deficiencies or disorders of the central nervous system or peripheral
CC nervous system by activating or inhibiting the proliferation,
CC differentiation or mobilisation (chemotaxis) of neuroblasts, stem cells
CC or glial cells. The sequences are useful as a marker or detector of a
CC particular nervous system disease or disorder such as Alzheimer's
CC disease, Pick's disease, Binswanger's disease, other senile dementia,
CC Parkinson's disease, obsessive compulsive disorders, epilepsy,
CC encephalopathy, ischaemia, addiction, multiple sclerosis, depression and
CC manic-depressive disorder. The present sequence represents an
CC oligonucleotide primer used in the identification of the cDNA sequences
CC of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
19 BAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 1028
ABQ73231/c
ID ABQ73231 standard; DNA; 19 BP.
XX
AC ABQ73231;
XX
27-SEP-2002 (first entry)
XX
Rabbit atherosclerosis related TOGA primer SEQ ID NO:26.
DE
KW Rabbit; Oryctolagus cuniculus; atherosclerosis; intimal hyperplasia;
KW TOGA primer; ss.
XX
OS Oryctolagus cuniculus.
XX
OS Synthetic.
XX
WO200242420-A2.
PN

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XX PD 30-MAY-2002.
XX XX
XX PF 21-NOV-2001; 2001WO-US044072.
XX XX
XX PR 21-NOV-2000; 2000US-0252216P.
XX XX
XX PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX PI Leonardi A, Sartani A, Glass JR, Hasel KW;
XX DR WPI; 2002-575233/61.
XX XX
XX PT New polynucleotides related to regulated genes characteristic of
XX PT atherosclerosis, useful for diagnosing, preventing, treating, modulating
XX PT or ameliorating atherosclerosis in a mammalian subject.
XX XX
XX PS Disclosure; Page 28; 130pp; English.
XX XX
XX CC The present invention describes an isolated polynucleotide (I) and its
XX CC complements, and degenerate variants, comprising a sequence selected from
XX CC those given in AB073206 to AB073222 (NS), which is a digital sequence tag
XX CC (DST) corresponding to mRNAs whose expression is regulated by
XX CC proliferative lesion development caused by mechanically induced intimal
XX CC hyperplasia, or by lercanidipine treatment, or by proliferative lesions
XX CC and reversed by lercanidipine treatment. (I) has antiatherosclerotic
XX CC activity and can be used in gene therapy. (I) can be used for diagnosing
XX CC a medical condition (e.g. atherosclerosis) in a subject which involves
XX CC determining the presence or absence of a mutation in (I) and diagnosing
XX CC the medical condition based on the presence or absence of the mutation.
XX CC (I) is also useful for diagnosing atherosclerosis, or the susceptibility
XX CC to atherosclerosis in a subject which involves detecting an alteration
XX CC (an increase or decrease) in amount of expression of (I). (I) is also
XX CC useful for diagnosing or monitoring the effects of treating a subject
XX CC with dihydropyridine calcium antagonist e.g., lercanidipine. (I) can also
XX CC be used for preventing, treating, modulating, or ameliorating a medical
XX CC condition such as atherosclerosis in a mammalian subject. The present
XX CC sequence represents a TOGA primer which is used in the exemplification of
XX CC the present invention
XX XX
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1029
AAD34663/C
ID AAD34663 standard; DNA; 19 BP.
AC AAD34663;
XX
XX DT 16-JUL-2002 (first entry)
XX XX
XX DE PCR primer #4 used for direct sequencing of TOGA generated PCR products.
XX XX
XX KW Hepatitis B virus; HBV infection; chronic hepatitis; toxicity; virucide;
XX KW acute hepatitis; therapeutic; gene therapy; vaccine; infectious disease;
XX KW TOGA; Total Gene expression Analysis; PCR; primer; ss.
XX OS Unidentified.
XX XX
XX PN WO200222783-A2.
XX XX
XX PD 21-MAR-2002.
XX XX
XX PF 17-SEP-2001; 2001WO-US029123.
XX PI

15-SEP-2000; 2000US-0233176P.
(DIGI-) DIGITAL GENE TECHNOLOGIES INC.
Chisari FV, Wieland SF, Guidotti LGDVM, Mueller R, Hilbush BS;
WPI; 2002-339865/37.
Preventing and treating hepatitis viral infection in a mammal, comprises
administering nucleic acid molecules that up- or down-regulate in
hepatitis B virus infection or polypeptides encoded by the nucleic acid
molecules.
Disclosure; Page 28; 125pp; English.
The present invention relates to a method for preventing, treating,
modulating or ameliorating a medical condition. The method involves
administering one or more nucleic acid molecules up- or down-regulated in
hepatitis B virus (HBV) infection or polypeptides encoded by the nucleic
acid molecules or antibodies that bind to the polypeptide. The method is
useful for preventing, treating, modulating or ameliorating a medical
condition. It is also useful for determining the presence or absence of a
mutation in the nucleic acid molecules or detecting an alteration in
expression of the polypeptide which is useful for the diagnosis of
hepatitis viral infection. The method is useful for assessing the stage
of hepatitis viral infection (e.g., acute hepatitis versus chronic
hepatitis) or assessing the efficacy or toxicity of therapeutic treatment
for hepatitis viral infection and a gene expression profile is useful for
identifying polypeptides and polynucleotides which are associated with
hepatitis viral infection. Sequences of the invention are useful in gene
therapy and as vaccines. Nucleic acid sequences are useful as a
diagnostic markers for HBV infection and for treating infectious
diseases. The present DNA sequence is a PCR primer which is used for
direct sequencing of TOGA (Total Gene expression Analysis) generated PCR
products
Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1030
AAD40279/C
ID AAD40279 standard; DNA; 19 BP.
AC AAD40279;
XX
XX DT 22-OCT-2002 (first entry)
XX XX
XX DE HOOK PCR primer used to isolate pumpkin 2beta-3beta hydroxylase cDNA.
XX XX
XX KW Gibberellin; transgenic plant; seed germination; seedling growth; GA;
XX KW transgenic; 2beta-3beta hydroxylase; enzyme; pumpkin; PCR; primer; ss.
XX OS Cucurbita pepo.
XX XX
XX PN US2002053095-A1.
XX XX
XX PD 02-MAY-2002.
XX XX
XX PF 10-AUG-1999; 99US-00371307.
XX XX
XX PR 10-AUG-1999; 99US-00371307.
XX XX
XX PA (BROW/) BROWN S M.
XX PI Brown SM, Ellich TD, Heck GR, Kishore GM, Loguach EW, Loguach SJ;

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PI Pillar KJ, Rao S, Ream JE;
XX WPI; 2002-489107/52.
XX
PT Control of gibberellin levels in plants useful to avoid unfavorable
PT conditions in crops to increase yields, using transgenic plants having
PT reduced seed germination and early seedling growth then treatment to
PT restore these properties.
XX
PS Example 19; Page 104; 155pp; English.
XX
CC The invention relates to control of gibberellin (GA) levels in plants.
CC The method involves producing transgenic plants having a phenotype of
CC reduced seed germination and reduced early seedling growth, then
CC restoring seed germination and early seedling growth by treating plants
CC with an appropriate compound when conditions are favourable. The method
CC is useful to control seed germination and/or early seedling growth in
CC agricultural production so that unfavorable environmental conditions
CC normally reducing agronomic output can be avoided and yields increased.
CC Plants also demonstrate increased uniformity of germination, emergence
CC and seedling vigor, so increasing yields at harvest. The method is
CC especially useful in crop plants such as e.g. canola, soybean, cotton,
CC etc., and is also useful in storage and transport of seeds to reduce
CC premature germination which may affect agronomic or food quality of the
CC seeds. The present sequence is a PCR primer used to isolate pumpkin 2beta
CC -3beta hydroxylase cDNA. This primer is used in the exemplification of
CC the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
19 BAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1031
ABZ68389/c
ID ABZ68389 standard; DNA; 19 BP.
XX
AC ABZ68389;
XX
XX 22-APR-2003 (first entry)
XX
DE Reverse transcription primer used to produce yeast cDNA.
XX
KW Histone acetyltransferase; histone deacetylase; gene expression profile;
KW chromatin-associated protein; gene expression; primer; ss.
XX
OS Synthetic.
XX
PN W02003000715-A1.
XX
XX 03-JAN-2003.
XX
XX 21-JUN-2002; 2002WO-US019750.
XX
XX 22-JUN-2001; 2001US-0300135P.
XX
XX (CERE-) CERES INC.
XX
XX Dang V, Okamuro J;
XX WPI; 2003-175280/17.
XX
XX New chimeric polypeptide comprising a histone acetyltransferase
PT polypeptide segment and a segment comprising a histone deacetylase
PT chromatin-associated protein complex subunit, useful for modulating gene
PT expression in cells.
XX

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PS Example 10; Page 54; 85pp; English.
XX
CC The specification describes chimeric histone acetyltransferase
CC polypeptides. The chimeric polypeptides comprise a polypeptide segment
CC that exhibits histone acetyltransferase activity, and a polypeptide
CC segment having 40% or greater sequence identity to a subunit of a histone
CC deacetylase chromatin-associated protein complex. The chimeric
CC polypeptides are useful for determining gene expression profiles in
CC specific cells, for modulating gene expression in specific cells, and for
CC making genetically modified eukaryotes. The present sequence represents a
CC reverse transcription primer used in the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
19 BAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1032
ACC79402/c
ID ACC79402 standard; DNA; 19 BP.
XX
AC ACC79402;
XX
XX 04-AUG-2003 (first entry)
XX
DE M13 sequencing primer 3' primer SEQ ID NO:84.
XX
KW Pathological condition; ataxia telangiectasia; AT; tumour; cancer;
KW cytostatic; vaccine; gene therapy; PCR primer; ss.
XX
OS Enterobacteria phage M13.
OS Synthetic.
XX
PN W02003033668-A2.
XX
XX 24-APR-2003.
XX
XX 17-OCT-2002; 2002WO-US033311.
XX
XX 17-OCT-2001; 2001US-0330206P.
XX
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
XX Barlow C, Winrow CJ, Callahan MLA, Pankratz DG, Vibat CRT;
XX Warren AJ;
XX WPI; 2003-393520/37.
XX
XX Preventing or treating a pathological condition e.g., ataxia
XX telangiectasia (AT), AT tumors or other cancers comprises administering
XX polynucleotides.
XX
XX Example 1; Page 76; 184pp; English.
XX
CC The present invention describes a method for preventing or treating a
CC pathological condition (comprising ataxia telangiectasia (AT), AT tumors
CC or other cancers), which comprises administering to a mammalian subject
CC at least one of: (a) a first polynucleotide comprising a sequence having
CC 38-889 bp (consisting of the sequences in ACC79319 to ACC79392 (I)) or a
CC second polynucleotide at least 95% identical to the first polynucleotide;
CC (b) a third polynucleotide comprising at least 10-bp sequence that is
CC hybridisable to the first polynucleotide under stringent conditions; or
CC (c) a gene corresponding to any of (1)-(2) or another gene at least 95%
CC identical to the gene. (1) have cytostatic activities, and can be used in
CC vaccines and in gene therapy. The method is useful for preventing or
CC treating e.g., ataxia telangiectasia (AT), AT tumors or other cancers.
CC ACC79393 to ACC79423 represent primers used in the exemplification of the

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CC present invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1033
AAD49149/c
ID AAD49149 standard; DNA; 19 BP.
XX
AC AAD49149;
XX
DT 07-MAR-2003 (first entry)
XX
DE 3' sequencing primer #1 used in the invention.
XX
KW Atherosclerosis; vaccine; nervous system disorder; Alzheimer's disease;
KW Parkinson's disease; multiple sclerosis; immune disorder; gene therapy;
KW autoimmune disorder; rheumatoid arthritis; hyperproliferative disorder;
KW haemolytic anaemia; graft-versus-host disease; inflammation; infection;
KW epilepsy; Addison's disease; neoplasm; tissue regeneration; chemotaxis;
KW food additive; food preservative; primer; ss.
XX
OS Unidentified.
XX
PN WO200281726-A2.
XX
PD 17-OCT-2002.
XX
PF 15-NOV-2001; 2001WO-US043741.
XX
PR 15-NOV-2000; 2000US-0248992P.
XX
PS 28-NOV-2000; 2000US-0253623P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Leonardi A, Sartani A, Glass J, Sutcliffe JG, Hasel KW;
XX WPI; 2003-058561/05.
XX
PT New polypeptide associated with atherosclerosis, useful for treating
PT atherosclerosis, nervous system disorders, immune disorders,
PT hyperproliferative disorders and infectious diseases.
XX
PS Disclosure; Page 139; 146pp; English.
XX
CC The invention relates to polynucleotides and polypeptides associated with
CC atherosclerosis. Polynucleotides of the invention are useful for delivery
CC of genes, DNA vaccines, diagnostic reagents, peptides, proteins or
CC macromolecules. Sequences of the invention are useful for treating
CC nervous system disorders (e.g., Alzheimer's disease, Parkinson's disease,
CC multiple sclerosis, epilepsy), immune disorders (e.g., autoimmune
CC disorders such as rheumatoid arthritis, Addison's disease, haemolytic
CC anaemia, graft-versus-host disease, inflammation), hyperproliferative
CC disorders (e.g., neoplasms) and infectious diseases (e.g., viral,
CC bacterial, fungal or parasite infection). They are used for regeneration
CC of tissues, to repair or replace or protect damage tissues, for increasing
CC chemotaxis activity of cells, for increasing or decreasing the
CC differentiation or proliferation of embryonic stem cells from a lineage,
CC for modulating mammalian characteristics, (such as body weight or
CC height), for modulating mammalian metabolism affecting catabolism,
CC anabolism, processing utilisation and storage of energy, to change a
CC mammal's mental or physical state, or as a food additive or preservative.
CC The invention is useful in gene therapy. The present sequence is a
CC sequencing primer used in the invention

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SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1034
AAD50267/c
ID AAD50267 standard; DNA; 19 BP.
XX
AC AAD50267;
XX
DT 24-MAR-2003 (first entry)
XX
DE 3' sequencing primer #1 used to illustrate the method of the invention.
XX
KW Gene expression; drug interaction mechanism; drug screening; primer;
KW genomic mapping; ss.
XX
OS Unidentified.
XX
PN WO200261045-A2.
XX
PD 08-AUG-2002.
XX
PF 01-FEB-2002; 2002WO-US002666.
XX
PR 01-FEB-2001; 2001US-00775217.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX (QUAN/) QUAN J.
XX
PI Quan J, Hilbush BS, Hasel KWPD, Sutcliffe GJ, Chang HW;
PI Callahan MA;
XX
XX WPI; 2003-092784/08.
XX
PT Simplified TOGA method for simultaneous sequence-specific identification
PT of multiple mRNA molecules in mRNA population, useful for determining
PT tissue-specific patterns of gene expression or mechanisms of drug
PT interaction.
XX
PS Disclosure; Page 39; 93pp; English.
XX
CC The present invention relates to a novel simplified TOGA (RTM) method for
CC simultaneous sequence-specific identification of multiple mRNA molecules
CC in a RNA population. The method involves characterising each of the
CC sequence-specific polymerase chain reaction (PCR) products by partial
CC sequence and length. The method is useful for determining tissue-specific
CC patterns of gene expression or mechanisms of drug interaction. It is also
CC useful for drug screening, studying physiological processes, genomic
CC mapping or manufacture of diagnostic, prognostic or therapeutic reagents.
CC The present sequence is a primer used to illustrate the method of the
CC invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1035
ADC21495/c

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ID ADC21495 standard; DNA; 19 BP.
XX AC ADC21495;
XX DT 18-DEC-2003 (first entry)
XX DE Human PRDI-BF1 RT-PCR primer.
XX tumor; antigen; CD8+ cytotoxic T lymphocyte; CTL; CTL-induced lysis;
KW multiple myeloma cell; human; PRDI-BF1;
KW positive regulatory domain I-binding factor-1; MHC;
KW major histocompatibility complex Class I; cytostatic; vaccine; ss;
KW primer; PCR.
XX OS Homo sapiens.
XX PN WO2003029282-A2.
XX PD 10-APR-2003.
XX PF 24-SEP-2002; 2002WO-EP010701.
XX PR 29-SEP-2001; 2001DE-01048236.
XX PA (IMMU-) IMMUGENICS AG.
XX PI Theobald M, Lotz C;
XX PR WPI; 2003-354724/33.
XX PT New tumor-associated oligopeptide, useful particularly for treating
XX multiple myeloma, is recognized by CD8 cytotoxic T cells, also
XX derivatives and related nucleic acid.
XX PS Disclosure; Page 22; 64pp; German.
XX CC This invention describes a novel tumor-associated oligopeptide that is
XX recognized as an antigen by CD8+ cytotoxic T lymphocytes (CTL) and causes
XX CTL-induced lysis and/or apoptosis of tumor cells, especially multiple
XX myeloma cells. The oligopeptide is derived from human PRDI-BF1 (positive
XX regulatory domain I-binding factor-1) which is able to induce an MHC
XX (major histocompatibility complex) Class I allele variant A2-restricted
XX immune response of CD8+ CTL against tumor cells. The products of the
XX invention have cytostatic activity and can be used in a vaccine. The
XX peptide of the invention, also related retro-inverse and pseudopeptides,
XX fusion proteins (FP), polynucleotides, vectors, host cells and antibodies
XX and T cell receptors specific for PRDI-BF1 peptides are useful for
XX treating diseases associated with PRDI-BF1, particularly tumors. The
XX products of the invention are also useful as diagnostic, therapeutic and
XX prophylactic agents for detecting, modifying, generating, expanding
XX and/or regulating activation and functional status of T cells, and for
XX preparation of poly- or mono-clonal or recombinant A2-restricted T cell
XX receptors and their functional equivalents. This sequence represents an
XX RT-PCR primer used to amplify the human PRDI-BF1 gene described in the
XX invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
1 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1036
AD74670
ID ADF74670 standard; DNA; 19 BP.
XX AC ADF74670;
XX
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DT 26-FEB-2004 (first entry)
XX' DNA oligo (30) used in preparing a library of same length signatures.
DE ss; tag-DNA signature; adapter-signature-adapter; parallel sequencing;
XX genomic mapping; genetic identification; medical diagnostic.
XX Unidentified.
XX OS WO2003091416-A2.
XX PN 06-NOV-2003.
XX PD 25-APR-2003; 2003WO-US013076.
XX PF 26-APR-2002; 2002US-0375782P.
XX PR (LYNX-) LYNX THERAPEUTICS INC.
XX PA Fischer A, Hiemisch H, Williams S, Brenner S, Walker R;
XX PI Vermaas E, Fu R;
XX PR WPI; 2003-865585/80.
XX PT Preparing a library of same-length signature sequences from a source
XX nucleic acid population by ligating to the cleaved ends, a second adapter
XX containing a recognition and cleavage site for a second restriction
XX endonuclease.
XX PS Disclosure; Fig 2a; 54pp; English.
XX CC This invention relates to a novel method for preparing a library of same-
XX length signature sequences from a source nucleic acid population.
XX Specifically, it comprises producing solid phase cloned libraries of
XX oligonucleotide tag-DNA signature sequence constructs, which are useful
XX for sequencing many polynucleotides simultaneously. The present invention
XX describes a kit for the construction of adapter-signature-adapter
XX constructs using 'first' and 'second' adapters each containing a specific
XX restriction endonuclease recognition site, and which flanks the same
XX length signature sequence. As such, using the method described herein it
XX is possible to do parallel sequencing of large populations of
XX polynucleotides for genomic mapping, genetic identification and medical
XX diagnostics. This oligonucleotide sequence is a DNA oligo involved in the
XX step wise process of preparing a library of same length signature
XX sequences from restriction fragments in an exemplification of the
XX invention.
XX SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db :|||||
1 BAAAAAAAAAAAAAAAAAAAAA 19

RESULT 1037
ADL24850/c
ID ADL24850 standard; DNA; 19 BP.
XX AC ADL24850;
XX DT 20-MAY-2004 (first entry)
XX DE Intestinal epithelium/peyer's patch M cell-related primer #15.
XX intestinal epithelium cell development; peyer's patch M cell development;
KW inflammatory bowel disease; gluteoenteropathy; infectious disease;
KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;
KW immune system disorder; hypersensitivity; anaphylaxis;
```

KW blood group incompatibility; ss; PCR; primer.
 XX Unidentified.
 XX
 XX WO200208052-A2.
 PN
 XX 17-OCT-2002.
 PD
 XX
 XX 04-APR-2002; 2002WO-US010873.
 PF
 XX
 XX 04-APR-2001; 2001US-0281416P.
 PR
 XX
 XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
 PA
 XX
 XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;
 PI
 XX WPI; 2003-075470/07.
 DR
 XX Novel isolated or purified polypeptide encoded by genes associated with
 XX PT intestinal epithelium or M cell development, differentiation or function,
 PT useful for treating autoimmune diseases and infectious diseases.
 CC
 XX Disclosure; SEQ ID NO 360; 152pp; English.
 PS
 XX The invention comprises DNA sequences which are associated with
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the
 CC invention are useful for assessing, modifying, modulating or regulating
 CC intestinal epithelium or M cell development. The DNA sequences of the
 CC invention are also useful in the treatment of: inflammatory bowel
 CC disease, glutenenteropathy, infectious diseases, autoimmune diseases
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),
 CC diseases or disorders of the immune system, hypersensitivity,
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence
 CC represents a primer that was used in the exemplification of the
 CC invention.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAA AAAAAAAAAA 2726
 Db 19 BAAAAA AAAAAAAAAA 1
 :|||||
 RESULT 1038
 ADY39466/c
 ID ADY39466 standard; DNA; 19 BP.
 XX
 AC ADY39466;
 XX
 XX 19-MAY-2005 (first entry)
 DT
 DE RT-PCR primer used to amplify yeast clone-derived plasmid RNA.
 XX
 XX plant growth regulant; plant; agriculture; plant breeding;
 KW transgenic plant; flowering; ss; RT-PCR; primer;
 KW reverse transcriptase PCR.
 XX
 XX Synthetic.
 OS
 XX WO2005019462-A1.
 PN
 XX
 XX 03-MAR-2005.
 PD
 XX 18-AUG-2003; 2003WO-US025997.
 PF
 XX 18-AUG-2003; 2003WO-US025997.
 PR
 XX (CERE-) CERES INC.
 XX

XX Feldman K, Pennell R, Kwok S, Dang V, Zhang H;
 PI WPI; 2005-214253/22.
 XX
 XX New isolated nucleic acids and polypeptides from Arabidopsis, Maize, or
 PT Brassica, useful for generating transgenic plants having increased size,
 PT increased number and size of rosette leaves and are late-flowering.
 XX
 XX Disclosure; Page 63; 151pp; English.
 PS
 XX The invention relates to a novel isolated nucleic acid molecule from
 CC Arabidopsis, Maize, or Brassica and encoding an amino acid sequence
 CC exhibiting at least 85% sequence identity to SEQ ID NO. 3, 5, 7, 10, 12,
 CC 14, 17, 19, 21, 24, 26, 28, 31, 34, 36, 38, 41, 43, 45, 48, or 49 as
 CC given in the specification. The nucleic acids and polypeptides of the
 CC invention may act as plant growth regulators and as such may be useful
 CC for generating transgenic plants having increased size, increased number
 CC and size of rosette leaves and are late-flowering. The current sequence
 CC is that of the RT-PCR primer of the invention which was used to amplify
 CC yeast clone-derived plasmid RNA.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAA AAAAAAAAAA 2726
 Db 19 BAAAAA AAAAAAAAAA 1
 :|||||
 RESULT 1039
 ADZ66610/c
 ID ADZ66610 standard; DNA; 19 BP.
 XX
 AC ADZ66610;
 XX
 XX 30-JUN-2005 (first entry)
 DT
 DE Non-viable seed-producing transgenic plant-related-oligo(dt)18 primer.
 XX
 XX transgenic plant; seed; artificial seed; PCR; primer; ss.
 KW
 XX Synthetic.
 OS
 XX WO2005035763-A1.
 PN
 XX
 XX 21-APR-2005.
 PD
 XX 17-SEP-2003; 2003WO-US029054.
 PF
 XX 17-SEP-2003; 2003WO-US029054.
 PR
 XX (CERE-) CERES INC.
 PA
 XX Feldman K, Nadzan G, Zhang H, Alexandrov N;
 PI WPI; 2005-315565/32.
 XX
 XX Novel polypeptide having characteristic of being lethal or non-viability
 PT polypeptide, useful for producing transgenic plants that produce seeds
 PT that are not viable, not fertile, and are not capable of germinating.
 XX
 XX Disclosure; Page 56; 389pp; English.
 PS
 XX The invention comprises the amino acid and coding sequences of lethal or
 CC non-viable proteins. The DNA and protein sequences of the invention are
 CC useful for transforming a plant cell, and producing transgenic plants
 CC that produce seeds that are not viable, not fertile, not capable of
 CC germinating, or are otherwise not capable of growing into mature plants.
 CC The present DNA sequence represents an oligo(dt)18 primer that was used

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CC in the exemplification of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match          0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1040
AEC21688/c
ID AEC21688 standard; DNA; 19 BP.
XX
AC AEC21688;
XX
DT 17-NOV-2005 (first entry)
XX
DE Oligo dTV primer, SEQ ID 1.
XX
KW Promoter; transcription; primer; ss.
XX
OS Synthetic.
XX
PN US2005204429-A1.
XX
PD 15-SEP-2005.
XX
PF 13-OCT-2004; 2004US-00965470.
XX
PR 14-OCT-2003; 2003US-0511460P.
XX
PA (CERE-) CERES INC.
XX
PI Penell R, Apuya N, Medrano L, Feldmann K;
XX
DR WPI; 2005-618221/63.
XX
CC New isolated nucleic acid promoter or promoter control element sequences,
PT useful for modulating transcription, e.g. constitutive transcription,
PT stress induced transcription, light induced transcription, or callus
PT transcription.
XX
PS Disclosure; SEQ ID NO 1; 42pp; English.
XX
CC The present invention relates to novel promoter sequences (AEC21689-
CC AEC21692) which are capable of modulating transcription. The sequences
CC are useful as promoter sequences or promoter control element sequences
CC for modulating transcription, e.g. constitutive transcription, stress
CC induced transcription, light induced transcription, dark induced
CC transcription, leaf transcription, root transcription, silique
CC transcription, callus transcription, flower transcription, immature bud
CC and inflorescence specific transcription, or senescing induced
CC transcription. The present sequence is a primer used for generating
CC probes for the promoter sequences of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match          0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1041
AED19813/c
ID AED19813 standard; DNA; 19 BP.
XX
AC AED19813;
XX
DT 01-DEC-2005 (first entry)
XX
DE Oligo (dT)18 primer used for modulating gene transcription.
XX
KW Transcription; primer; ss.
XX
OS Unidentified.
XX
PN US2005223422-A1.
XX
PD 06-OCT-2005.
XX
PF 23-SEP-2004; 2004US-00950321.
XX
PR 23-SEP-2003; 2003US-0505689P.
XX
PR 14-OCT-2003; 2003US-0511460P.
XX
PR 06-NOV-2003; 2003US-0518075P.
XX
PR 04-DEC-2003; 2003US-0527611P.
XX
PR 12-DEC-2003; 2003US-0529352P.
XX
PR 13-FEB-2004; 2004US-0544771P.
XX
PR 30-JUN-2004; 2004US-0583691P.
XX
PA (CERE-) CERES INC.
XX
PI Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
PI Pennell R, Schneeberger R, Wu C;
XX
DR WPI; 2005-664198/68.
XX
CC New isolated nucleic acid molecule capable of modulating transcription,
PT or its complement, useful for transcription of polynucleotides in a host
PT cell or transformed host organism.
XX
PS Disclosure; SEQ ID NO 1; 210pp; English.
XX
CC The invention relates to a nucleic acid molecule or its complement
CC sequence capable of modulating transcription. The nucleic acid molecule
CC of the invention is useful for transcription of polynucleotides in a host
CC cell or transformed host organism. The present sequence is a primer used
CC for modulating gene transcription.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match          0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1042
AED21472/c
ID AED21472 standard; DNA; 19 BP.
XX
AC AED21472;
XX
DT 01-DEC-2005 (first entry)
XX
DE Primer d(T)18, SEQ ID NO: 73, used to generate probes for hybridization.
XX
KW Transgenic plant; plant growth regulation; development; food;
KW agriculture; horticulture; primer; ss.
XX
OS Unidentified.
XX
PN US2005223434-A1.
XX
PD 06-OCT-2005.

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Tue Nov 7 10:41:34 2006

XX 23-SEP-2004; 2004US-00950095.
 PF 23-SEP-2003; 2003US-0505420P.
 PR (CERE-) CERES INC.
 XX Alexandrov N, Zhihong C, Fang Y, Feldmann K, Kiegle EA, Kwok S;
 PI Lu V, Penell R, Schneeberger R, Wu C;
 XX WPI; 2005-683371/70.
 DR
 XX New nucleotide sequences, useful modifying plant characteristics or for
 PT modulating and manipulating growth, development, and biochemistry of a
 PT plant.
 XX Disclosure; SEQ ID NO 73; 132pp; English.
 PS
 XX The present invention relates to polynucleotides and their encoding
 CC polypeptides with the use of those products for making transgenic plants.
 CC The sequences of the invention are useful modifying plant characteristics
 CC or for modulating and manipulating growth, development and biochemistry
 CC of a plant. The invention is useful for producing plants with increased
 CC yield of biomass or chemical components, in particular food and
 CC reproducible raw materials. The present sequence is a d(T)18 primer used
 CC to generate probes for hybridization. This sequence is used in making
 CC transgenic plants.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 Db :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1043
 AED60795/C
 ID AED60795 standard; DNA; 19 BP.
 XX
 AC AED60795;
 XX
 XX 29-DEC-2005 (first entry)
 DT Synthetic primer #1.
 XX
 DE Transcription; vector; primer; ss.
 XX
 KW Synthetic.
 OS
 XX US2005246785-A1.
 PN
 XX
 PD 03-NOV-2005.
 XX
 XX 30-SEP-2004; 2004US-00957569.
 PF
 XX 14-OCT-2003; 2003US-0511460P.
 PR 06-NOV-2003; 2003US-0518075P.
 PR 04-DEC-2003; 2003US-0527611P.
 PR 13-FEB-2004; 2004US-0544771P.
 XX
 XX (CERE-) CERES INC.
 PA
 XX Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
 PI Penell R, Schneeberger R, Wu C;
 XX
 XX WPI; 2005-733852/75.
 DR
 XX New isolated promoter sequences and promoter control elements, useful for
 PT modulating transcription of a desired polynucleotide in plants.
 PT

XX Disclosure; SEQ ID NO 1; 787pp; English.
 PS
 XX The invention relates to an isolated nucleic acid molecule capable of
 CC modulating transcription, where the nucleic acid molecule shows at least
 CC 80% sequence identity to one of the promoter sequences given in the
 CC specification or its complement. The invention also relates to a vector
 CC construct comprising a first nucleic acid molecule capable of modulating
 CC transcription, where the nucleic acid molecule shows at least 80%
 CC sequence identity to one of the promoter sequences given in the
 CC specification, and a second nucleic acid molecule having to be transcribed, where
 CC the first and second nucleic acid molecules are heterologous to each
 CC other and are operably linked together, a host cell comprising the
 CC nucleic acid, where the nucleic acid molecule is flanked by an exogenous
 CC sequence or comprising the vector construct, a method of modulating
 CC transcription and a plant comprising the vector construct. The first
 CC nucleic acid molecule is capable of modulating transcription during the
 CC developmental times, in response to a stimulus or in a cell tissue or
 CC organ as given in the specification, where the first nucleic acid
 CC molecule is inserted into a plant cell and the plant cell is regenerated
 CC into a plant. The nucleic acid molecules, which are promoter sequences,
 CC and promoter control elements are useful for modulating transcription of
 CC a desired polynucleotide in plants. This sequence represents a synthetic
 CC primer used in the scope of the invention.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 Db :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1044
 AED87374/C
 ID AED87374 standard; DNA; 19 BP.
 XX
 AC AED87374;
 XX
 XX 12-JAN-2006 (first entry)
 DT Plant promoter associated primer.
 XX
 DE Plant; transgenic plant; herbicide resistance; ss; primer.
 XX
 KW Unidentified.
 OS
 XX WO2005104823-A2.
 PN
 XX 10-NOV-2005.
 PD
 XX 25-APR-2005; 2005WO-US014265.
 PF
 XX 23-APR-2004; 2004US-0564658P.
 PR 23-APR-2004; 2004US-0564678P.
 PR
 XX (CERE-) CERES INC.
 PA
 XX Kwok S;
 PI
 XX WPI; 2005-769438/78.
 DR
 XX Novel isolated nucleic acid molecule comprising plant promoter sequence,
 PT useful as shade responsive promoter for modulating transcription of
 PT desired plant and for producing plants having shade responsive
 PT characteristics.
 XX
 XX Disclosure; SEQ ID NO 1; 157pp; English.
 PS
 XX The invention relates to an isolated nucleic acid molecule (1),
 CC

comprising a plant promoter sequence. (I) is useful for producing a transformed plant having shade responsive characteristics different from those of a naturally occurring plant of the same species cultivated under the same conditions, which involves introducing (I) into a plant or plant cell to modulate transgene expression in a plant. (I) is useful for expressing a structural DNA sequence in a plant. (I) is useful for understanding developmental mechanisms e.g. shade responsive promoters that are induced during callus formation and somatic embryo formation, and for isolating trans-acting factors. (I) is also useful for modulating transcription in most cells of an organism under most environmental conditions e.g. for modulating genes involved in defense, pest resistance, herbicide resistance etc. The present sequence represents a plant promoter associated primer.

Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 :|||||
 Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1045
 AEF26613/c
 ID AEF26613 standard; DNA; 19 BP.

AC AEF26613;
 DT 23-MAR-2006 (first entry)
 DE Oligo(dT)18 primer.
 KW ss; primer; transgenic plant.
 OS Synthetic.

PN US2006015970-A1.
 PD 19-JAN-2006.
 PF 09-DEC-2004; 2004US-00010239.
 PR 12-DEC-2003; 2003US-0529352P.

PA (CERS-) CERS INC.
 PI Pennell R, Okamuro J, Schneberger R, Fang Y, Kwok S, Jofuku D;
 PT Kiegle EA, Donson J, Apuya N;
 DR WPI; 2006-099536/10.

New nucleic acid molecule, useful in producing transgenic plants for use as models for modifying plant characteristics e.g. increase in plant height, number or size of leaves, or wood products.

Example 1; SEQ ID NO 132; 245pp; English.

The present invention relates to isolated nucleic acid molecules from *Arabidopsis thaliana* and the polypeptides encoded by them. The patentees also claim a vector construct containing such nucleic acid molecules, and a host cell transformed; a method for detecting a nucleic acid in a sample; and a plant, plant cell, plant material or seed of a plant which comprises the nucleic acid molecule which is exogenous or heterologous to the plant or plant cell. The vector construct comprises a first nucleic acid having a regulatory sequence capable of causing transcription and/or translation in a plant and a second nucleic acid having the sequence of the isolated nucleic acid molecule. The first and second nucleic acids are operably linked and where the second nucleic acid is heterologous to any element in the vector construct. The isolated nucleic acid molecules are useful in producing transgenic plants for use as models for modifying

plant characteristics, e.g. increase in plant height, number or size of leaves, or wood products. The present sequence is that of a primer used in generation of labeled probes from first-stand cDNA.

Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 :|||||
 Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1046
 AAZ09197/c
 ID AAZ09197 standard; DNA; 20 BP.

AC AAZ09197;
 DT 19-OCT-1999 (first entry)
 DE Oligonucleotide 9 for DNA analysis.
 KW Primer; DNA analysis; amplification; hybridisation; ss.

OS Synthetic.

PN JP11196874-A.

PD 27-JUL-1999.

PF 14-JAN-1998; 98JP-00005399.

PR 14-JAN-1998; 98JP-00005399.

PA (HITA) HITACHI LTD.

DR WPI; 1999-496652/42.

PT Analysis of DNA fragment - comprises addition of known common oligonucleotide, amplification of resultant DNA fragment and analysis and labelling of amplified DNA.

Example 5; Page 12; 17pp; Japanese.

This invention describes a novel method for the analysis of a DNA fragment which comprises: (i) addition of a known common oligonucleotide sequence to at least one terminal of each DNA fragment. (ii) amplification of the resultant DNA fragment as a primer using a first common primer containing a complementary nucleotide sequence to the above mentioned known common oligonucleotide sequence, a second common primer containing a complementary nucleotide sequence to the prepared known common oligonucleotide sequence optionally having been introduced with complementary nucleotide sequence at a terminal, and a specific primer capable of hybridisation with a DNA fragment containing whole or part of the gene having known sequence, to give amplified DNA, (iii) analysis of the amplified DNA to find the information of the DNA fragment, in which the specific primer is designed to prepare fragments of the common first and second primers and to give short fragments of amplified DNA and (iv) labelling them to make their differentiation. Differentiation of CC information of known and unknown genes readily provides information of CC unknown gene and simultaneous monitoring of signals derived from minor CC genes. Furthermore, labelling of DNAs according to functions of known CC genes can be performed. AAZ09189-209201 represent oligonucleotide primers used to illustrate the method of the invention

Sequence 20 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 2 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 8.9e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY	2708	TAATAAAAAAAAAAAAAA 2726	
DB	19	BAAAAAAAAAAAAAAAAAA 1	
RESULT 1047			
AAQ34110			
ID	AAQ34110	standard; DNA; 18 BP.	
XX			
AC	AAQ34110;		
XX			
DT	25-MAR-2003	(revised)	
DT	02-FEB-1993	(first entry)	
XX			
DE	Sequence of a microsatellite from clone TGLA60B.		
XX			
XX	PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;		
KW	genetic mapping; traits; amplification; ss.		
XX			
OS	Bos taurus.		
XX			
PN	WO9213102-A1.		
XX			
PD	06-AUG-1992.		
XX			
PF	15-JAN-1992;	92WO-US000340.	
XX			
PR	15-JAN-1991;	91US-00642342.	
XX			
PA	(GENM-) GENMARK.		
XX			
PI	Georges M, Massey JM;		
XX			
XX	WPI; 1992-284684/34.		
DR			
XX	Polymorphic bovine DNA markers - used in genetic identification, gene		
PT	mapping, and selective breeding.		
XX			
PS	Table 7; Page 375; 517pp; English.		
XX			
CC	The sequence is that of a bovine microsatellite sequence obtd. by		
CC	screening a library of bovine MboI DNA fragments of between 250 and 500		
CC	bp with an (AC) ₁₅ and a (TC) ₁₅ oligonucleotide probe. One out of 50		
CC	clones cross-hybridised. Assuming independent distribution of		
CC	microsatellites and MboI sites, the frequency of (T) ₆ n > 9 microsatellites		
CC	in the bovine genome is estimated at >100, 000. The sequence information		
CC	for ca. 230 such bovine microsatellites is summarised in the		
CC	specification and indexed herein (see below). The sequences upstream and		
CC	downstream of the microsatellite sequence were used to generate the		
CC	required PCR primers for in vitro amplification of the corresp.		
CC	microsatellite (using the program OPTIPRIM). The microsatellites may be		
CC	used to identify individuals, for parentage testing, and in the genetic		
CC	mapping of economic trait loci, or genes involved the determinism of		
CC	economically important traits esp. in cattle, to allow selective		
CC	breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN		
CC	field.)		
XX			
SQ	Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;		
	Query Match	0.7%; Score 18; DB 1; Length 18;	
	Best Local Similarity	100.0%; Pred. No. 8.7e+02;	
	Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	2709	AAAAAAAAAAAAAAAAA 2726	
DB	1	AAAAAAAAAAAAAAAAA 18	
RESULT 1048			
AAQ75025/c			
ID	AAQ75025	standard; RNA; 18 BP.	
XX			

XX Synthetic.
 XX WO9732023-A1.
 XX PD 04-SEP-1997.
 XX PF 28-FEB-1997; 97WO-AU000124.
 XX PR 01-MAR-1996; 96AU-00008386.
 XX PA (FLOR-) FLORIGENE LTD.
 XX PI Brugliera F, Holton TA, Michael MZ;
 XX DR WPI; 1997-448691/41.
 XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 XX Example 15; Page 59; 234pp; English.
 XX Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3' hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAA AAAAAAAAAA 2725
 Db |||||
 18 TAAAAA AAAAAAAAAA 1
 RESULT 1050
 ID AAV21970/c
 XX AAV21970 standard; DNA; 18 BP.
 XX AC AAV21970;
 XX DT 14-JUL-1998 (first entry)
 XX DE Nuclease resistant antisense oligo NBT 13 targeted against (T)18.
 XX KW Nuclease resistant; bacterial infection; antibiotic; target;
 XX KW veterinary medicine; treatment; human; industrial process;
 XX KW bacterial control; ss.
 XX OS Synthetic.
 XX PN WO9803533-A1.
 XX PD 29-JAN-1998.
 XX PF 23-JUL-1997; 97WO-US012961.
 XX PR 24-JUL-1996; 96US-00685575.
 XX PA (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
 XX PI Arrow A, Dale RMK, Thompson TL;
 XX DR WPI; 1998-120687/11.
 XX

PT Treating bacterial infections in humans or animals with
 PT oligonucleotide(s) - resistant to nuclease and targeted to bacterial
 PT nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
 XX with antibiotics.
 XX Claim 49; Page 87; 163pp; English.
 XX This antisense oligonucleotide is nuclease resistant and can be used in
 CC the treatment of animals, including humans, having a bacterial infection.
 CC The treatment comprises administration of such nuclease resistant
 CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
 CC and formulated with a carrier. A compound comprising this nuclease
 CC resistant oligonucleotide can be covalently linked to an antibiotic. The
 CC method is used to treat infections by a wide variety of Gram-positive and
 CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
 CC The methods are particularly used in immuno-compromised individuals (e.g.
 CC patients with acquired immunodeficiency syndrome or those receiving
 CC chemotherapy or radiation therapy), optionally in combination with, or
 CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
 CC therapeutic use, the oligonucleotides can be used to control bacteria in
 CC laboratory cultures, foods, beverages and industrial processes. The
 CC oligonucleotides are specific for bacteria, without affecting metabolism
 CC in mammalian cells. They may also activate RNase H and have a general,
 CC non-specific immune-stimulating effect. The oligonucleotides can be
 CC administered orally, intranasally, rectally, topically or by injection,
 CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
 XX enhances cellular uptake
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAA AAAAAAAAAA 2726
 Db |||||
 18 AAAAAA AAAAAAAAAA 1
 RESULT 1051
 ID AAX19943/c
 XX AAX19943 standard; DNA; 18 BP.
 XX AC AAX19943;
 XX DT 14-JUN-1999 (first entry)
 XX DE Primer SEQ ID NO:3 from JP11075880.
 XX KW Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
 XX OS Synthetic.
 XX PN JP11075880-A.
 XX PD 23-MAR-1999.
 XX PF 10-JUL-1998; 98JP-00195719.
 XX PR 14-JUL-1997; 97JP-00205378.
 XX PA (KAGA) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
 XX DR WPI; 1999-257710/22.
 XX Labelling of an oligonucleotide - useful for detecting genes.
 XX Example 1; Page 7; 10pp; Japanese.
 XX A method has been developed for labelling an oligonucleotide having a
 CC repeated sequence of (X)n (where X and Y consists of a combination of
 CC adenine and thymine or uracil or guanine and cytosine, and n is an
 CC integer of 1 or more) at the 3'-terminal side in which the repeated

CC sequence is added and extended using a labelled body of the nucleotide
 CC constituting the repeated sequence and a DNA polymerase lacking in 5' to
 CC 3' exonuclease activity. The method can be used for detecting a gene. The
 CC method can detect a gene in a sensitivity up to ten times higher than
 CC prior art methods. The present sequence represents a primer used in an
 CC example from the present invention

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1052
 AAX19942
 ID AAX19942 standard; DNA; 18 BP.
 XX
 AC AAX19942;
 XX
 DT 14-JUN-1999 (first entry)
 XX
 DE Primer SEQ ID NO:2 from JP11075880.
 XX
 KW Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
 OS Synthetic.

XX JP11075880-A.
 PN
 XX 23-MAR-1999.
 PD
 XX 10-JUL-1998; 98JP-00195719.
 PF
 XX 14-JUL-1997; 97JP-00205378.
 PR
 XX (KAGA) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
 PA
 XX WPI; 1999-257710/22.
 DR
 XX
 XX Labelling of an oligonucleotide - useful for detecting genes.

PT
 XX Example 1; Page 7; 10pp; Japanese.
 PS
 XX A method has been developed for labelling an oligonucleotide having a
 CC repeated sequence of (XY)_n (where X and Y consists of a combination of
 CC adenine and thymine or uracil or guanine and cytosine, and n is an
 CC integer of 1 or more) at the 3'-terminal side in which the repeated
 CC sequence is added and extended using a labelled body of the nucleotide
 CC constituting the repeated sequence and a DNA polymerase lacking in 5' to
 CC 3' exonuclease activity. The method can be used for detecting a gene. The
 CC method can detect a gene in a sensitivity up to ten times higher than
 CC prior art methods. The present sequence represents a primer used in an
 CC example from the present invention

XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1053
 AAZ87161
 ID AAZ87161 standard; RNA; 18 BP.

XX AAZ87161;
 AC
 XX 08-MAY-2000 (first entry)
 DT
 XX Oligoarabinonucleotide SEQ ID NO:2.
 DE
 XX Beta-D-arabinose; antisense; inhibition; transcription; expression;
 KW reverse transcription; viral replication; RNase H cleavage;
 KW triple helix formation; ss.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "Ribose moiety replaced by beta-D-arabinose"

XX WO9967378-A1.

XX 29-DEC-1999.

XX 17-JUN-1999; 99WO-CA000571.

XX 19-JUN-1998; 98CA-02241361.

XX (UYMC-) UNITV MCGILL.

XX Damha MJ, Patniak WA, Noronha AM, Wilds C, Borkow G, Arion D;

XX WPI; 2000-160584/14.

XX Therapeutic composition containing antisense oligonucleotides that
 PT include arabinose sugars, particularly for inhibiting viral replication.

XX Example 1; Page 29; 91pp; English.

XX The invention relates to a new composition for selective, sequence-
 CC specific inhibition of gene transcription and expression in a host. The
 CC composition comprises oligonucleotides containing arabinose sugars that
 CC can hybridise to either a single-stranded (ss) RNA to induce RNase H
 CC cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
 CC helix, thereby inhibiting DNA replication and/or transcription. The
 CC oligoarabinonucleotides are used for antisense inhibition of gene
 CC expression or to prevent DNA replication, or reverse transcription of RNA
 CC by retroviruses. The compositions are therefore particularly used to
 CC inhibit retroviral replication. The oligoarabinonucleotides can also be
 CC used, in combination with RNase H, as reagents for sequence-specific
 CC cleavage or RNA mapping, and additionally for the study and control of
 CC gene expression in cells. The oligoarabinonucleotides have excellent
 CC affinity for RNA, increased resistance to nucleases and show little if
 CC any non-specific binding to cellular or serum proteins. They target ss
 CC RNA, but not complementary ss DNA, so may be useful for targeting
 CC retroviral genomic RNA to inhibit the early stages of viral replication.
 CC Oligoarabinonucleotides containing pyrimidine bases form triple helices
 CC with significantly higher thermal stability than those produced by normal
 CC oligonucleotides. Sequences AAZ87160-287164 represent
 CC oligoarabinonucleotides containing beta-D-arabinose used in an
 CC exemplification of the present invention

XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1054
 AAZ87162/c

AAZ87162 standard; RNA; 18 BP.
 AAZ87162;
 08-MAY-2000 (first entry)
 Oligoarabinonucleotide SEQ ID NO:3.
 Beta-D-arabinose; antisense; inhibition; transcription; expression;
 reverse transcription; viral replication; RNase H cleavage;
 triple helix formation; ss.
 Synthetic.
 Key Location/Qualifiers
 modified_base 1..18
 /*tag= a
 /note= "Ribose moiety replaced by beta-D-arabinose"
 WO9967378-A1.
 29-DEC-1999.
 17-JUN-1999; 99WO-CA000571.
 19-JUN-1998; 98CA-02241361.
 (UYMC-) UNIV MCGILL.
 Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
 WPI; 2000-160584/14.
 Therapeutic composition containing antisense oligonucleotides that
 include arabinose sugars, particularly for inhibiting viral replication.
 Example 1; Page 29; 91pp; English.
 The invention relates to a new composition for selective, sequence-
 specific inhibition of gene transcription and expression in a host. The
 composition comprises oligonucleotides containing arabinose sugars that
 can hybridize to either a single-stranded (ss) RNA to induce RNase H
 cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
 helix, thereby inhibiting DNA replication and/or transcription. The
 oligoarabinonucleotides are used for antisense inhibition of gene
 expression or to prevent DNA replication, or reverse transcription of RNA
 by retroviruses. The compositions are therefore particularly used to
 inhibit retroviral replication. The oligoarabinonucleotides can also be
 used, in combination with RNase H, as reagents for sequence-specific
 cleavage or RNA mapping, and additionally for the study and control of
 gene expression in cells. The oligoarabinonucleotides have excellent
 affinity for RNA, increased resistance to nucleases and show little if
 any non-specific binding to cellular or serum proteins. They target ss
 RNA, but not complementary ss DNA, so may be useful for targeting
 retroviral genomic RNA to inhibit the early stages of viral replication.
 Oligoarabinonucleotides containing pyrimidine bases form triple helices
 with significantly higher thermal stability than those produced by normal
 oligonucleotides. Sequences AAZ87160-287164 represent
 oligoarabinonucleotides containing beta-D-arabinose used in an
 exemplification of the present invention
 Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1055

AAZ87166/c
 ID AAZ87166 standard; DNA; 18 BP.
 XX
 AC AAZ87166;
 XX
 DT 08-MAY-2000 (first entry)
 XX
 DE Deoxyarabinonucleotide SEQ ID NO:7.
 XX
 KW 2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
 KW transcription; expression; reverse transcription; viral replication;
 KW RNase H cleavage; triple helix formation; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
 fluoro-beta-D-arabinose"
 FT
 FT
 FT
 FT
 FN WO9967378-A1.
 XX
 PD 29-DEC-1999.
 XX
 PF 17-JUN-1999; 99WO-CA000571.
 XX
 PR 19-JUN-1998; 98CA-02241361.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
 XX
 DR WPI; 2000-160584/14.
 XX
 PT Therapeutic composition containing antisense oligonucleotides that
 PT include arabinose sugars, particularly for inhibiting viral replication.
 XX
 PS Example 2; Page 31; 91pp; English.
 XX
 CC The invention relates to a new composition for selective, sequence-
 CC specific inhibition of gene transcription and expression in a host. The
 CC composition comprises oligonucleotides containing arabinose sugars that
 CC can hybridize to either a single-stranded (ss) RNA to induce RNase H
 CC cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
 CC helix, thereby inhibiting DNA replication and/or transcription. The
 CC oligoarabinonucleotides are used for antisense inhibition of gene
 CC expression or to prevent DNA replication, or reverse transcription of RNA
 CC by retroviruses. The compositions are therefore particularly used to
 CC inhibit retroviral replication. The oligoarabinonucleotides can also be
 CC used, in combination with RNase H, as reagents for sequence-specific
 CC cleavage or RNA mapping, and additionally for the study and control of
 CC gene expression in cells. The oligoarabinonucleotides have excellent
 CC affinity for RNA, increased resistance to nucleases and show little if
 CC any non-specific binding to cellular or serum proteins. They target ss
 CC RNA, but not complementary ss DNA, so may be useful for targeting
 CC retroviral genomic RNA to inhibit the early stages of viral replication.
 CC Oligoarabinonucleotides containing pyrimidine bases form triple helices
 CC with significantly higher thermal stability than those produced by normal
 CC oligonucleotides. Sequences AAZ87165-287169 represent
 CC oligoarabinonucleotides containing 2'-deoxy-2'-fluoro-beta-D-
 CC arabinose used in an exemplification of the present invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1


```

XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO20012972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX WI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Claim 101; Page 56; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1061
AAF82472/C
ID AAF82472 standard; DNA; 18 BP.
XX AC AAF82472;
XX 29-JUN-2001 (first entry)
XX DT 29-JUN-2001 (first entry)
XX DE Phagemid vector pCR2.1 polylinker oligonucleotide #6.
XX KW Phagemid vector; pCR2.1; rat; secreted factor; P00210D09; cardiant;
XX KW nephrotropic; antiinflammatory; gene therapy; cardiac disease;
XX KW renal disease; inflammatory disease; polylinker; ss.
XX OS Synthetic.
XX PN WO200123419-A2.

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XX 05-APR-2001.
XX PD 27-SEP-2000; 2000WO-US026582.
XX PF 27-SEP-1999; 99US-0156277P.
XX PR (SCIO-) SCIOS INC.
XX PI Stanton LW, Kapoun AM;
XX WI; 2001-328177/34.
XX PT Novel secreted factor encoded by clone P00210D09 useful for diagnosing,
XX PT treating and/or preventing various cardiac, renal and inflammatory
XX PT diseases.
XX PS Example 1; Page 41; 69pp; English.
XX CC The present sequence corresponds to polylinker DNA of the phagemid vector
XX CC pCR2.1. It was used in the construction of a normalised rat cDNA library,
XX CC which was used in an example demonstrating differential expression of a
XX CC rat gene referred to as clone P00210D09. The invention relates to a
XX CC polypeptide comprising a sequence of at least 80% identity to residues 22
XX CC -122 of the present sequence, or a sequence encoded by a nucleic acid
XX CC hybridising under stringent conditions to the complement of the coding
XX CC region comprising 1031 nucleotides, and having at least one biological
XX CC activity of the polypeptide encoded by clone P00210D09. The polypeptides
XX CC and polynucleotides of the invention are useful for the treatment of
XX CC cardiac, renal and inflammatory diseases. The polynucleotides are useful
XX CC in antisense mediated gene inhibition and in gene therapy. The
XX CC polypeptides are useful in assays for identifying lead compounds that may
XX CC be used as therapeutic agents in the treatment of cardiac, kidney or
XX CC inflammatory diseases
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1062
AAS94743/C
ID AAS94743 standard; DNA; 18 BP.
XX AC AAS94743;
XX 12-MAR-2002 (first entry)
XX DT 12-MAR-2002 (first entry)
XX DE Rat secreted factor DNA oligonucleotide probe #6.
XX KW Rat; secreted factor polypeptide; cardiac disease; renal disease; kidney;
XX KW inflammatory disease; congestive heart failure; myocarditis; asthma; ss;
XX KW dilated congestive cardiomyopathy; angina pectoris; cardiac arrhythmia;
XX KW myocardial infarction; pulmonary hypertension; arteriosclerosis; stroke;
XX KW atherosclerosis; cardiac tumour; glomerulonephritis; nephrotic syndrome;
XX KW renal infarction; hereditary nephritis; polycystic kidney disease;
XX KW chronic renal failure; renal vein thrombosis; medullary sponge kidney;
XX KW rheumatoid arthritis; osteoarthritis; psoriasis; restenosis; PCR primer;
XX KW graft versus host reaction; Crohn's disease; ulcerative colitis; probe;
XX KW Alzheimer's disease; gene therapy.
XX OS Synthetic.
XX PN WO200174901-A2.
XX PD 11-OCT-2001.

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PF 23-MAR-2001; 2001WO-US009555.
XX
XX
PR 31-MAR-2000; 2000US-0193548P.
PR 14-MAR-2001; 2001US-00809545.
XX
XX
PA (SCIO-) SCIOS INC.
XX
XX
PI Stanton LW, White RT;
XX
XX
DR WPI; 2002-010779/01.
XX
XX
PT Novel secreted factor polypeptide useful for treating cardiac diseases
PT such as arteriosclerosis, myocardial infarction, inflammatory diseases
PT such as asthma, stroke, and rheumatoid arthritis and renal diseases.
XX
PS Example 1; Page 51; 189pp; English.
XX
XX
CC The invention relates to rat secreted factor polypeptides and the
CC polynucleotides encoding them. The sequences are useful for treating
CC cardiac, renal or inflammatory diseases. These include cardiac diseases
CC such as congestive heart failure, myocarditis, dilated congestive
CC cardiomyopathy, angina pectoris, myocardial infarction, cardiac
CC arrhythmia, pulmonary hypertension, arteriosclerosis, atherosclerosis and
CC cardiac tumours, renal diseases such as glomerulonephritis, nephrotic
CC syndrome, renal infarction, hereditary nephritis, polycystic kidney
CC disease, chronic renal failure, renal vein thrombosis and medullary
CC sponge kidney and inflammatory diseases such as asthma, rheumatoid
CC arthritis, osteoarthritis, stroke, psoriasis, restenosis, graft versus
CC host reaction, Crohn's disease, ulcerative colitis and Alzheimer's
CC disease. Sequences AAS94693-AAS94745 represent cDNA clones, which encode
CC the secreted factor polypeptides of the invention, and oligonucleotide
CC probes and PCR primers
XX
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1063
ABS78455/c
ID ABS78455 standard; DNA; 18 BP.
XX
XX
AC ABS78455;
XX
XX
DT 13-DEC-2002 (first entry)
XX
XX
DE Angiogenesis inhibitory oligonucleotide #939.
XX
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX
OS Synthetic.
XX
XX
PN WO200253141-A2.
XX
XX
PD 11-JUL-2002.
XX
XX
PF 14-DEC-2001; 2001WO-US048458.
XX
XX
PR 14-DEC-2000; 2000US-0255534P.
XX
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX
XX
PI Bratzler RL;
XX
XX
DR WPI; 2002-566690/60.
XX
XX
PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
XX
XX
PS Claim 2; Page 36; 276pp; English.
XX
XX
CC The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC acid of the invention
XX
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1064
ABS78429/c
ID ABS78429 standard; DNA; 18 BP.
XX
XX
AC ABS78429;
XX
XX
DT 13-DEC-2002 (first entry)
XX
XX
DE Angiogenesis inhibitory oligonucleotide #913.
XX
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX
OS Synthetic.
XX
XX
PN WO200253141-A2.
XX
XX
PD 11-JUL-2002.
XX
XX
PF 14-DEC-2001; 2001WO-US048458.
XX
XX
PR 14-DEC-2000; 2000US-0255534P.
XX
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX
XX
PI Bratzler RL;
XX
XX
DR WPI; 2002-566690/60.
XX
XX
PT Inhibiting angiogenesis in a subject, involves administering at least one

```

PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 35; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1065
 ABL39401/c
 ID ABL39401 standard; DNA; 18 BP.
 AC ABL39401;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Immunostimulatory nucleic acid SEQ ID NO: 837.
 XX
 KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 PF 22-JUN-2001; 2001WO-US020154.
 XX
 PR 22-JUN-2000; 2000US-0213346P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Weiner G, Hartmann G;
 XX
 DR WPI; 2002-154611/20.
 XX
 CC Treating or preventing cancer, such as basal cell carcinoma, comprises
 CC administering immunostimulatory nucleic acids that induce expression of
 CC cell surface antigens and antibodies to a subject having or at risk of
 CC developing cancer.
 XX
 PS Disclosure; Page 308; 312pp; English.
 XX
 CC The present invention relates to methods for treating or preventing

CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1066
 AAD41497/c
 ID AAD41497 standard; DNA; 18 BP.
 XX
 AC AAD41497;
 XX
 DT 30-OCT-2002 (first entry)
 XX
 DE Oligonucleotide used for amplifying sea hare cytoplasm L DNA.
 XX
 KW Apoptosis; ion channel modulator; hyperproliferative disease; tumour;
 KW therapy; leukaemia; carcinoma; sarcoma; degenerative disease; melanoma;
 KW Alzheimer's disease; Parkinson's disease; arteriosclerosis;
 KW heart disease; stroke; vascular disease; neurotic; neuroprotective;
 KW cerebroprotective; cardiac; cytotoxic protein; cytoplasm L; ss.
 XX
 OS Unidentified.
 XX
 PN WO200231144-A2.
 XX
 PD 18-APR-2002.
 XX
 PF 12-OCT-2001; 2001WO-EP011837.
 XX
 PR 13-OCT-2000; 2000EP-00122466.
 XX
 PA (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
 XX
 PI Butzke D, Machuy N, Rudel T, Meyer TF;
 XX
 DR WPI; 2002-537205/57.
 XX
 CC Novel polypeptide having cytotoxic activity obtainable from Aplysia,
 CC useful for destroying tumors, for identifying novel targets for the
 CC development of anti-tumor agents, and as specific ion channel modulators.
 XX
 PS Example 5; Page 37; 87pp; English.
 XX
 CC The present invention relates to novel polypeptides having cytotoxic
 CC activity obtainable from sea hare Aplysia. Sequences of the invention are
 CC useful for the manufacture of cytotoxic agents against apoptosis-
 CC resistant cells, where the agents are useful for diagnosis, prevention,
 CC treatment of disorders associated with dysfunctions of GAP-SH3 binding
 CC protein, factors for generating or detoxifying reactive oxygen species
 CC (ROS) and factors for blocking and/or by-passing of caspases. They are
 CC useful for tumour therapy. Cytotoxic proteins of the invention are useful
 CC for destroying tumors and/or selectively killing cells in tissues, for
 CC identifying novel targets for the development of pharmaceutical agents,

CC preferably anti-tumour agents and as specific ion channel modulators,
 CC e.g., blockers or openers for therapy, diagnostic or research. They are
 CC useful for the diagnosis and therapy of hyperproliferative diseases,
 CC preferably tumours, e.g., leukaemia, carcinoma, sarcoma and melanoma.
 CC They are also useful for development of drugs for the treatment of
 CC degenerative diseases such as Alzheimer's disease, Parkinson's disease,
 CC arteriosclerosis, heart diseases, stroke and vascular diseases. The
 CC present sequence is an oligonucleotide which is used for amplifying sea
 CC hare cytoplasmic L DNA. This sequence is used in the exemplification of the
 CC invention

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1067

ABS53437/C

ID ABS53437 standard; DNA; 18 BP.

XX AC ABS53437;

XX DT 29-NOV-2002 (first entry)

XX DE Poly d(T) primer.

XX KW Terminal continuation; TC; ss; second strand cDNA synthesis; primer;

XX KW poly d(T).

XX OS Synthetic.

XX PN WO200265093-A2.

XX XX 22-AUG-2002.

XX PF 14-FEB-2002; 2002WO-US005713.

XX PR 14-FEB-2001; 2001US-0268645P.

XX PR 14-FEB-2001; 2001US-0268664P.

XX PR 18-JUL-2001; 2001US-0306216P.

XX PR 07-NOV-2001; 2001US-0344557P.

XX PR 07-NOV-2001; 2001US-0348242P.

XX PR 09-NOV-2001; 2001US-0350176P.

XX PA (BAYU) BAYLOR COLLEGE MEDICINE.

XX PA (REME-) RES FOUND MENTAL HYGIENE INC.

XX PI Ginsberg SD, Che S;

XX DR WPI; 2002-567050/60.

XX PT Increasing efficiency of second strand cDNA synthesis using terminal
 PT continuation model before performing further RNA amplification by RNA
 PT transcription.

XX PS Example 7; Page 80; 128pp; English.

XX This invention relates to a novel method for increasing the efficiency of
 CC second strand cDNA synthesis through a mechanism of terminal
 CC continuation. In the method an RNA molecule is obtained and a first
 CC primer is added that comprises a region that hybridises to a
 CC complementary region of the molecule before a second primer is added
 CC comprising at least one riboguanine at the 3' end of the primer. A first
 CC complementary nucleic acid molecule is synthesised, the RNA molecule and
 CC second primer are removed and a second complementary nucleic acid
 CC molecule is synthesised to form a second hybrid with an extension product
 CC of the third primer bound to the first complementary molecule. The method

CC of the invention is useful for increasing the efficiency of second strand
 CC cDNA synthesis and may be used for linear amplification of genetic
 CC signals from histologically stained tissue. The present sequence
 CC represents a poly d(T) PCR primer used in the method of the invention
 XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1068

ABA93239/C

ID ABA93239 standard; DNA; 18 BP.

XX AC ABA93239;

XX DT 18-APR-2002 (first entry)

XX DE Adaptor oligonucleotide SEQ ID NO:2.

XX KW Detection; comparative detection; adaptor; ss.

XX OS Synthetic.

XX PN JP2001333800-A.

XX XX 04-DEC-2001.

XX PF 30-MAY-2000; 2000JP-00160324.

XX PR 30-MAY-2000; 2000JP-00160324.

XX PA (UNIT-) UNITECH CO LTD.

XX DR WPI; 2002-135950/18.

XX PT Comparative detection of the amounts of RNA and DNA.

XX PS Disclosure; Page 9; 9pp; Japanese.

XX The present invention describes a method for the comparative detection of
 CC the amount of an RNA. The method comprises: (a) cDNAs obtained by
 CC transcribing respectively from at least two tissue RNAs are respectively
 CC fragmented by using a same restriction enzyme; (b) each different adaptor
 CC and a common adaptor are added to each of the cDNA fragments derived from
 CC the same or different tissues by the step (a); (c) the resultant adaptor-
 CC added cDNAs are mixed together; (d) an adaptor primer having the common
 CC sequence to said different adaptor and a gene-specific adaptor are used
 CC to amplify said adaptor-added cDNAs containing no region derived from
 CC polyadenylic acid of the mRNA before the addition of the adaptor among
 CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the
 CC cDNA amounts are measured between the tissues; (f) the RNA is detected
 CC from the measured result; (g) each different adaptor and a common adaptor
 CC are added to each of the genomic DNA fragments derived from a same or
 CC different individuals; (h) the resultant adaptor-added genomic DNAs are
 CC mixed together; (i) the adaptor-added genomic DNAs are amplified by using
 CC an adaptor primer having the common sequence to the different adaptor and
 CC a sequence-specific adaptor; and (j) the ratios of the amplified amounts
 CC of the genomic DNAs are measured between the individuals. The method is
 CC used for the detection of the amounts of RNA and DNA. The present
 CC sequence represents an oligonucleotide which is used in the
 CC exemplification of the present invention

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

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Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1069
AAD56466
ID AAD56466 standard; RNA; 18 BP.
XX AC AAD56466;
XX AC AAD56446;
XX DT 07-AUG-2003 (first entry)
XX DE Target RNA #1 used in the exemplification of the invention.
XX KW Acyclic linker; gene expression; gene therapy; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viarovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX DE Novel acyclic linker-containing oligonucleotide useful for preventing or
PT decreasing translation, reverse transcription and/or replication of a
PT target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 5; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
CC the invention are useful for preventing or decreasing translation,
CC reverse transcription and/or replication of a target RNA in a system.
CC They are useful for selectively preventing gene expression in a sequence-
CC specific manner, for hybridising to complementary RNA such as cellular
CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
CC RNA. They are also useful therapeutically in formulations or medicaments
CC to prevent or treat a disease characterised by the expression of a
CC particular target RNA. The invention is used in gene therapy. The present
CC sequence is a target RNA, used in the exemplification of the invention
XX SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1070
AAD56440/C
ID AAD56440 standard; DNA; 18 BP.
XX AC AAD56440;
XX AC AAD56446;
XX DT 07-AUG-2003 (first entry)
XX DE Antisense oligo #1, to elicit RNase H degradation of target RNA.

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XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
KW antisense; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viarovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX DE Novel acyclic linker-containing oligonucleotide useful for preventing or
PT decreasing translation, reverse transcription and/or replication of a
PT target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 9; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
CC the invention are useful for preventing or decreasing translation,
CC reverse transcription and/or replication of a target RNA in a system.
CC They are useful for selectively preventing gene expression in a sequence-
CC specific manner, for hybridising to complementary RNA such as cellular
CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
CC RNA. They are also useful therapeutically in formulations or medicaments
CC to prevent or treat a disease characterised by the expression of a
CC particular target RNA. The invention is used in gene therapy. The present
CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
CC H degradation of target RNA. This sequence is used in the exemplification
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1071
AAD56446/C
ID AAD56446 standard; DNA; 18 BP.
XX AC AAD56446;
XX AC AAD56446;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #1, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
KW antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
FT modified_base 1..18
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
XX PN WO2003037909-A1.

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XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MW, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX PT decreasing translation, reverse transcription and/or replication of a
XX PT target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 7; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX CC the invention are useful for preventing or decreasing translation,
XX CC reverse transcription and/or replication of a target RNA in a system.
XX CC They are useful for selectively preventing gene expression in a sequence-
XX CC specific manner, for hybridising to complementary RNA such as cellular
XX CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX CC RNA. They are also useful therapeutically in formulations or medicaments
XX CC to prevent or treat a disease characterised by the expression of a
XX CC particular target RNA. The invention is used in gene therapy. The present
XX CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX CC H degradation of target RNA. This sequence is used in the exemplification
XX CC of the invention
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1072
ACH03247/c
ID ACH03247 standard; DNA; 18 BP.
XX AC ACH03247;
XX DT 25-SEP-2003 (first entry)
XX DE Immunostimulatory nucleic acid #882.
XX KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
XX KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX OS Synthetic.
XX PN US2003050268-A1.
XX PD 13-MAR-2003.
XX PF 29-MAR-2002; 2002US-00112653.
XX PR 29-MAR-2001; 2001US-0279642P.
XX PA (KRIE/) KRIEG A M.
XX PA (BERG/) BERG D J.
XX PI Krieg AM, Berg DJ;

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XX DR WPI; 2003-521815/49.
XX PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX PT disease by administering an immunostimulatory nucleic acid.
XX PS Disclosure; Page 33; 229pp; English.
XX CC The invention describes a method of treating non-allergic inflammatory
XX CC disease comprising administering to a subject having or at risk of
XX CC developing a non-allergic inflammatory disease an immunostimulatory
XX CC nucleic acid for prevention or treatment of the disease. The method is
XX CC useful for treating non-allergic inflammatory diseases, such as
XX CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX CC This sequence represents an immunostimulatory nucleic acid
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1073
AAD57871/c
ID AAD57871 standard; DNA; 18 BP.
XX AC AAD57871;
XX DT 20-NOV-2003 (first entry)
XX DE Antisense oligo #1 used in the exemplification of the invention.
XX KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
XX KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; ss.
XX OS Unidentified.
XX PN WO2003064441-A2.
XX PD 07-AUG-2003.
XX PF 31-JAN-2003; 2003WO-CA000129.
XX PR 01-FEB-2002; 2002US-0352873P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Parniak MA;
XX DR WPI; 2003-689523/65.
XX PT New oligonucleotide, useful for preventing or treating a disease related
XX PT to a target RNA in a system, e.g., AIDS or hepatitis B.
XX PS Example 2; Page 35; 73pp; English.
XX CC The present invention relates to a new oligonucleoside which comprises
XX CC alternating first and second segments. The first segment comprises at
XX CC least one sugar modified nucleoside. The second segment comprises at
XX CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX CC each of the first and second segments, so that it comprises at least 4
XX CC alternating segments. The oligonucleotide is useful for preparing a
XX CC composition for inducing RNase H-mediated cleavage of a target RNA in a
XX CC system, preventing or decreasing translation, transcription or
XX CC replication of a target RNA in a system, detecting the presence of a
XX CC target RNA in a system, validating a gene target corresponding to a

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CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense oligonucleotide used in the exemplification of
 CC the invention
 CC
 CC Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1074
 AAD57878/c
 ID AAD57878 standard; DNA; 18 BP.
 XX
 AC AAD57878;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Antisense DNA-RNA hybrid #2 used in the exemplification of the invention.
 XX
 KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
 KW ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 1..3
 FT /*tag= a
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 7..9
 FT /*tag= b
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 13..15
 FT /*tag= c
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 XX
 PN WO2003064441-A2.
 XX
 XX 07-AUG-2003.
 XX
 XX 31-JAN-2003; 2003WO-CA000129.
 XX
 XX 01-FEB-2002; 2002US-0352873P.
 PR
 XX (UYMC-) UNIV MCGILL.
 PA
 XX Damha MJ, Parniak MA;
 PI
 XX WPI; 2003-689523/65.
 DR
 XX New oligonucleotide, useful for preventing or treating a disease related
 XX to a target RNA in a system, e.g., AIDS or hepatitis B.
 PT
 XX Example 2; Page 35; 73pp; English.
 PS
 XX The present invention relates to a new oligonucleoside which comprises
 CC alternating first and second segments. The first segment comprises at
 CC least one sugar modified nucleoside. The second segment comprises at
 CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
 CC each of the first and second segments, so that it comprises at least 4
 CC alternating segments. The oligonucleotide is useful for preparing a
 CC composition for inducing RNase H-mediated cleavage of a target RNA in a

CC system, preventing or decreasing translation, transcription or
 CC replication of a target RNA in a system, detecting the presence of a
 CC target RNA in a system, validating a gene target corresponding to a
 CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
 CC the invention
 CC
 CC Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1075
 AAD57879/c
 ID AAD57879 standard; DNA; 18 BP.
 XX
 AC AAD57879;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Antisense DNA-RNA hybrid #3 used in the exemplification of the invention.
 XX
 KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
 KW ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 1..6
 FT /*tag= a
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 13..18
 FT /*tag= b
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 XX
 PN WO2003064441-A2.
 XX
 XX 07-AUG-2003.
 XX
 XX 31-JAN-2003; 2003WO-CA000129.
 XX
 XX 01-FEB-2002; 2002US-0352873P.
 PR
 XX (UYMC-) UNIV MCGILL.
 PA
 XX Damha MJ, Parniak MA;
 PI
 XX WPI; 2003-689523/65.
 DR
 XX New oligonucleotide, useful for preventing or treating a disease related
 XX to a target RNA in a system, e.g., AIDS or hepatitis B.
 PT
 XX Example 2; Page 35; 73pp; English.
 PS
 XX The present invention relates to a new oligonucleoside which comprises
 CC alternating first and second segments. The first segment comprises at
 CC least one sugar modified nucleoside. The second segment comprises at
 CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
 CC each of the first and second segments, so that it comprises at least 4
 CC alternating segments. The oligonucleotide is useful for preparing a
 CC composition for inducing RNase H-mediated cleavage of a target RNA in a
 CC system, preventing or decreasing translation, transcription or

CC replication of a target RNA in a system, detecting the presence of a
 CC target RNA in a system, validating a gene target corresponding to a
 CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
 CC the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 6 T; 12 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1076
 AAD57877/C
 ID AAD57877 standard; DNA; 18 BP.
 AC AAD57877;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Antisense DNA-RNA hybrid #1 used in the exemplification of the invention.
 XX
 KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
 KW ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 1
 FT /tag= a
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 3
 FT /tag= b
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 5
 FT /tag= c
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 7
 FT /tag= d
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 9
 FT /tag= e
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 11
 FT /tag= f
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 13
 FT /tag= g
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 15
 FT /tag= h
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 17
 FT /tag= i
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 XX

PN WO2003064441-A2.
 XX
 PD 07-AUG-2003.
 XX
 PF 31-JAN-2003; 2003WO-CA000129.
 XX
 PR 01-FEB-2002; 2002US-0352873P.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA;
 XX
 DR WPI; 2003-689523/65.
 XX
 PT New oligonucleotide, useful for preventing or treating a disease related
 XX to a target RNA in a system, e.g., AIDS or hepatitis B.
 XX
 PS Example 2; Page 35; 73pp; English.
 XX
 CC The present invention relates to a new oligonucleoside which comprises
 CC alternating first and second segments. The first segment comprises at
 CC least one sugar modified nucleoside. The second segment comprises at
 CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
 CC each of the first and second segments, so that it comprises at least 4
 CC alternating segments. The oligonucleotide is useful for preparing a
 CC composition for inducing RNase H-mediated cleavage of a target RNA in a
 CC system, preventing or decreasing translation, transcription or
 CC replication of a target RNA in a system, detecting the presence of a
 CC target RNA in a system, validating a gene target corresponding to a
 CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
 CC the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1077
 AAD57890
 ID AAD57890 standard; RNA; 18 BP.
 AC AAD57890;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Target RNA #1 used in RNase H assay.
 XX
 KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; ss.
 XX
 OS Unidentified.
 XX
 PN WO2003064441-A2.
 XX
 PD 07-AUG-2003.
 XX
 PF 31-JAN-2003; 2003WO-CA000129.
 XX
 PR 01-FEB-2002; 2002US-0352873P.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA;
 XX


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AC ADE77617;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human probe NEG for elongation mediated multiplexed analysis of HLA-DR.
XX
KW probe; ss; negative control; CFTR; human leukocyte antigen; HLA;
XX genetic testing; carrier screening; genotyping; profiling; polymorphic;
KW multiplexed elongation assay; enzymatic recognition;
KW cystic fibrosis conductance transmembrane regulator.
XX
OS Synthetic.
OS Homo sapiens.
XX
FN WO2003034029-A2.
XX
PD 24-APR-2003.
XX
PF 15-OCT-2002; 2002WO-US033012.
XX
PR 15-OCT-2001; 2001US-0329427P.
PR 15-OCT-2001; 2001US-0329428P.
PR 15-OCT-2001; 2001US-0329619P.
PR 15-OCT-2001; 2001US-0329620P.
PR 14-MAR-2002; 2002US-0364416P.
XX
PA (BIOA-) BIOARRAY SOLUTIONS LTD.
XX
XX Li AX, Hashmi G, Seul M;
XX
XX WPI; 2003-393553/37.
XX
XX Concurrent interrogation of a number of polymorphic sites, useful for
XX genetic testing, carrier screening, genetic profiling, and identity
XX testing, comprises conducting a multiplexed elongation assay using
XX probes.
XX
XX Example 9; Page 46; 143pp; English.
XX
XX This invention relates to a novel method for the concurrent interrogation
XX of a number of polymorphic sites in the presence of, and without
XX interference from, non-designated polymorphic sites. Specifically, it
XX comprises conducting a multiplexed elongation assay by applying one or
XX more temperature cycles to achieve linear amplification of the target or
XX a combination of annealing and elongation steps under temperature-
XX controlled conditions. Furthermore, this detection method uses probe
XX extension or elongation and relies on enzymatic recognition, a superior
XX technique that no longer depends on differential hybridisation. The
XX present invention describes probes and methods useful for identifying or
XX detecting polymorphisms at one or more designated sites, such that they
XX can identify mutations within the cystic fibrosis conductance
XX transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)
XX genes. In addition, concurrent interrogation of a multiplicity of
XX polymorphic sites is useful for genetic testing, carrier screening,
XX genotyping or genetic profiling, and identity testing. This
XX oligonucleotide is the negative control probe used for the elongation
XX mediated multiplexed analysis of HLA-DR, in an exemplification of the
XX invention.
XX
XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2726
XX | | | | | | | | | | | | | | | | | |
XX Db 1 AAAAAAAAAAAAAAAAAA 18
XX
XX RESULT 1081
XX ADZ47933/c
XX ID ADZ47933 standard; DNA; 18 BP.
XX
XX AC ADI34489;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Nucleotide sequence of an oligo dT18.
XX
XX KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
XX OS Synthetic.
XX
XX FN WO2003102243-A1.
XX
XX PD 11-DEC-2003.
XX
XX PF 30-MAY-2003; 2003WO-US017103.
XX
XX PR 31-MAY-2002; 2002US-0384454P.
XX
XX PA (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX

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XX
XX ADZ47933;
XX
DT 16-JUN-2005 (first entry)
XX
DE Primer #10.
XX
KW DNA detection; RNA detection; primer; ss.
XX
OS Synthetic.
XX
FN JP2003116597-A.
XX
PD 22-APR-2003.
XX
PF 05-OCT-2001; 2001JP-00309382.
XX
PR 05-OCT-2001; 2001JP-00309382.
XX
PA (HITA) HITACHI LTD.
XX
XX WPI; 2003-601826/57.
XX
XX Detecting nucleic acid, by hybridizing nucleic acid with other nucleic
XX acid target obtained from reverse transcription or RNA amplification, and
XX other single stranded nucleic acid probe immobilized on a support body.
XX
XX Example 2; Page 6; 10pp; Japanese.
XX
XX The present invention relates to a method for detecting nucleic acid
XX (NA). The method involves hybridizing the NA with nucleic acid target
XX sequence obtained from reverse transcription or RNA amplification using
XX the sample RNA as a template and single stranded probes immobilized on a
XX support body. The present sequence was used to illustrate the method of
XX the invention.
XX
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2726
XX | | | | | | | | | | | | | | | | | |
XX Db 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1082
XX ADI34489/c
XX ID ADI34489 standard; DNA; 18 BP.
XX
XX AC ADI34489;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Nucleotide sequence of an oligo dT18.
XX
XX KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
XX OS Synthetic.
XX
XX FN WO2003102243-A1.
XX
XX PD 11-DEC-2003.
XX
XX PF 30-MAY-2003; 2003WO-US017103.
XX
XX PR 31-MAY-2002; 2002US-0384454P.
XX
XX PA (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX

```

DR WPI; 2004-035466/03.
 XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
 PT RNA transcription from a polynucleotide template, comprises eliminating
 PT single-stranded oligonucleotide from the transcription sample.
 XX
 XX Example 1; SEQ ID NO 8; 26pp; English.
 XX
 XX The invention relates to amplifying for RNA in a sample comprises
 CC eliminating single-stranded oligonucleotide from the transcription
 CC sample. The method involves synthesizing single-stranded cDNA by
 CC incubating the sample RNA with reverse transcriptase and an
 CC oligonucleotide primer that primes synthesis in a direction toward 5' end
 CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
 CC to form a transcription sample containing a cDNA template; eliminating
 CC single-stranded oligonucleotide from the transcription sample; and
 CC transcribing the cDNA template into RNA using an RNA polymerase. The
 CC method is useful for improving RNA polymerase based RNA transcription
 CC from a polynucleotide template. The method inhibits the undesired non-
 CC template derived production of RNA in the transcription reaction.
 CC Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
 CC transcription reaction.
 XX
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1083
 ADH78590
 ID ADH78590 standard; DNA; 18 BP.
 XX
 AC ADH78590;
 XX
 DT 22-APR-2004 (first entry)
 DE
 DE Test element oligonucleotide #2.
 XX
 XX Fluid functional property; fluid flow pattern;
 KW fluid reagent distribution; time dependent fluid reactivity; ss.
 KW
 XX Synthetic.
 OS
 XX US2003232343-A1.
 PN
 XX 18-DEC-2003.
 PD
 XX 14-JUN-2002; 2002US-00172675.
 PF
 XX 14-JUN-2002; 2002US-00172675.
 PR
 XX (LEPR/) LEPROUST E M.
 PA (AMOR/) AMORESE D A.
 PA (PECK/) PECK B J.
 XX
 PI Leproust EM, Amorese DA, Peck BJ;
 XX
 XX WPI; 2004-061269/06.
 DR
 XX Determining a functional property of fluid in chamber by introducing a
 PT support comprising test elements having reaction and detection domains,
 PT introducing a test fluid, and detecting locations not reactive with the
 PT fluid.
 XX
 XX Example 2; SEQ ID NO 2; 22pp; English.
 PS
 XX The invention relates to a method of determining a functional property of

CC a fluid in a chamber comprising introducing into the chamber a support to
 CC which is bound several test elements, each of the test elements
 CC comprising a reaction domain and a detection domain, introducing into the
 CC chamber a fluid that is interactive with the reaction domains, removing
 CC the fluid from the chamber, determining by means of the detection domains
 CC the locations at which the fluid has not interacted with the reaction
 CC domains, and relating the locations to the functional property of the
 CC fluid. The reaction domains involves nucleotides. The detection domain
 CC comprises a member of a specific binding pair. The determining of the
 CC step involves treating the test elements to modify only those reaction
 CC domains that have interacted with the fluid. The functional property is
 CC chosen from the flow pattern of the fluid, reagent distribution within
 CC the fluid and time dependent reactivity of the fluid. The method is
 CC useful for determining a functional property of a fluid in a chamber and
 CC for synthesizing arrays of biopolymers e.g., arrays of polynucleotides.
 CC The method provides for the characterisation of a new fluid in a known
 CC flow cell, a known fluid in a new flow cell or a new fluid/flow cell
 CC combination. This sequence represents a test element used in the method
 CC of the invention.
 XX
 XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 1 AAAAAAAAAAAAAAAAAA 18
 RESULT 1084
 ADO28710
 ID ADO28710 standard; DNA; 18 BP.
 XX
 AC ADO28710;
 XX
 DT 15-JUL-2004 (first entry)
 DE
 DE Single stranded cDNA production poly-A-tail seqid 6.
 XX
 XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;
 KW poly-A-tail; ss.
 KW
 XX Synthetic.
 OS
 XX US6706476-B1.
 PN
 XX 16-MAR-2004.
 PD
 XX 09-MAR-2001; 2001US-00803263.
 PF
 XX 22-AUG-2000; 2000US-0226954P.
 PR
 XX (AZIG-) AZIG BIOSCIENCE AS.
 PA
 XX Thirstrup K, Warthoe P, Pettersson NB;
 PI
 XX WPI; 2004-326403/30.
 XX
 XX Synthesizing single stranded cDNA, involves annealing cDNA synthesis
 PT primer to RNA and synthesizing first cDNA strand, ligating adaptor to
 PT single stranded cDNA using DNA ligase, and amplifying ligated single
 PT stranded cDNA fragment.
 XX
 XX Example 1; SEQ ID NO 6; 22pp; English.
 PS
 XX The invention describes a method of synthesising single stranded cDNA by
 CC a 5'-ligated adaptor-mediated process involving: annealing a cDNA
 CC synthesis primer to RNA, separating the cDNA strand from the RNA,
 CC purifying the cDNA, contacting the cDNA with an adaptor, ligating the
 CC adaptor through 5'-phosphate on strand (II) of the adaptor to single
 CC stranded using DNA ligase, and amplifying the obtained ligated single

CC stranded fragment in an molecular amplification procedure. The method is
 CC useful for: synthesising a single stranded cDNA by a 5'-ligated adaptor-
 CC mediated process, where the source of nucleic acid is chosen from blood,
 CC serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
 CC saliva. The tissue sample comprises a cell population which may be single
 CC cell, 100-100000 cells or more as desired; making a cDNA library from a
 CC collection of mRNA molecules in a sample, where the method is applied to
 CC amplify the cDNAs corresponding to the mRNAs by annealing one or more
 CC cDNA synthesis primers to several mRNAs in the sample; producing a
 CC subtractive hybridisation probe which involves synthesising a double-
 CC stranded cDNA collection from a first mRNA population by the method,
 CC where primer 1 is modified by biotin in the 5' end, isolating the biotin-
 CC containing single stranded cDNA (sense) by use of streptavidin coated
 CC magnetic beads, synthesising a double-stranded cDNA collection from a
 CC second mRNA population according to the method, isolating the non-biotin-
 CC containing single stranded cDNA (anti-sense) by use of streptavidin
 CC coated magnetic beads, hybridising the sense to the anti-sense cDNA,
 CC where an unhybridised sub-population of the anti-sense cDNA is found,
 CC isolating the unhybridised sub-population of the anti-sense cDNA by use of
 CC streptavidin coated cDNA, and generating a second double-stranded cDNA
 CC collection from the unhybridised sub-population by PCR using primer 1 and
 CC primer 2; and detecting expression of a gene in a pre-selected cell
 CC population. The method is an improved method for producing amplified
 CC heterogeneous populations of cDNA from limited quantities of RNA or other
 CC nucleic acid. This sequence represents a poly-A-tail used to in the
 CC production single stranded cDNA.

SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1085

ADO28711/c

ID ADO28711 standard; DNA; 18 BP.

XX ADO28711;

XX 15-JUL-2004 (first entry)

XX Single stranded cDNA production poly-A-tail complement seqid 7.

XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;

KW poly-A-tail; ss.

XX Synthetic.

XX US6706476-B1.

XX 16-MAR-2004.

XX 09-MAR-2001; 2001US-00803263.

XX 22-AUG-2000; 2000US-0226954P.

XX (AZIG-) AZIGN BIOSCIENCE AS.

XX Thirstrup K, Warthoe P, Pettersson NB;

XX WPI; 2004-326403/30.

XX Synthesizing single stranded cDNA, involves annealing cDNA synthesis
 PT primer to RNA and synthesizing first cDNA strand, ligating adaptor to
 PT single stranded cDNA using DNA ligase, and amplifying ligated single
 PT stranded cDNA fragment.

PS Example 1; SEQ ID NO 7; 22pp; English.

XX

CC The invention describes a method of synthesising single stranded cDNA by
 CC a 5'-ligated adaptor-mediated process involving: annealing a cDNA
 CC synthesis primer to RNA, separating the cDNA strand from the RNA,
 CC purifying the cDNA, contacting the cDNA with an adaptor, ligating the
 CC adaptor through 5'-phosphate on strand (ii) of the adaptor to single
 CC stranded using DNA ligase, and amplifying the obtained ligated single
 CC stranded fragment in an molecular amplification procedure. The method is
 CC useful for: synthesising a single stranded cDNA by a 5'-ligated adaptor-
 CC mediated process, where the source of nucleic acid is chosen from blood,
 CC serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
 CC saliva. The tissue sample comprises a cell population which may be single
 CC cell, 100-100000 cells or more as desired; making a cDNA library from a
 CC collection of mRNA molecules in a sample, where the method is applied to
 CC amplify the cDNAs corresponding to the mRNAs by annealing one or more
 CC cDNA synthesis primers to several mRNAs in the sample; producing a
 CC subtractive hybridisation probe which involves synthesising a double-
 CC stranded cDNA collection from a first mRNA population by the method,
 CC where primer 1 is modified by biotin in the 5' end, isolating the biotin-
 CC containing single stranded cDNA (sense) by use of streptavidin coated
 CC magnetic beads, synthesising a double-stranded cDNA collection from a
 CC second mRNA population according to the method, isolating the non-biotin-
 CC containing single stranded cDNA (anti-sense) by use of streptavidin
 CC coated magnetic beads, hybridising the sense to the anti-sense cDNA,
 CC where an unhybridised sub-population of the anti-sense cDNA is found,
 CC isolating the unhybridised sub-population of the anti-sense cDNA by use of
 CC streptavidin coated cDNA, and generating a second double-stranded cDNA
 CC collection from the unhybridised sub-population by PCR using primer 1 and
 CC primer 2; and detecting expression of a gene in a pre-selected cell
 CC population. The method is an improved method for producing amplified
 CC heterogeneous populations of cDNA from limited quantities of RNA or other
 CC nucleic acid. This sequence represents the complement of a poly-A-tail
 CC used to in the production single stranded cDNA.

SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1086

ADO26684/c

ID ADO26684 standard; DNA; 18 BP.

XX ADO26684;

XX 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:77.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYQU) UNIV QUEENSLAND.

XX Frazer IH;

XX WPI; 2004-411519/38.

DR P-PSDB; ADO26685.

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XX Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
XX
XX Example 1; SEQ ID NO 77; 86pp; English.
XX
XX The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in an organism of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism of interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1087
AD026682
ID AD026682 standard; DNA; 18 BP.
XX
XX ADO26682;
XX
XX 12-AUG-2004 (first entry)
XX
XX Synthetic leader sequence encoding DNA SEQ ID NO:75.
XX
XX phenotype; phenotypic preference; phenotype modulation; leader; ds.
XX
XX Synthetic.
XX
XX WO2004042059-A1.
XX

```

```

XX 21-MAY-2004.
XX
XX 10-NOV-2003; 2003WO-AU001487.
XX
XX 08-NOV-2002; 2002US-0425163P.
XX
XX (UYQU ) UNIV QUEENSLAND.
XX
XX Frazer IH;
XX
XX WPI; 2004-411519/38.
XX
XX P-PSDB; ADO26683.
XX
XX Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
XX
XX Example 1; SEQ ID NO 75; 86pp; English.
XX
XX The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism of interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism of interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.
XX
XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 1 AAAAAAAAAAAAAAAAAA 18
XX
RESULT 1088
ADP86130/c

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ID ADP86130 standard; DNA; 18 BP.
AC ADP86130;
XX
DT 09-SEP-2004 (first entry)
XX
DE CpG immunostimulatory oligonucleotide #1.
XX
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma;
KW intraepithelial neoplasia; melanoma; neuroblastoma; Hodgkin's lymphoma;
KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone"
XX
FN WO2004053104-A2.
XX
PD 24-JUN-2004.
XX
PF 11-DEC-2003; 2003WO-US039775.
XX
PR 11-DEC-2003; 2002US-0432409P.
PR 25-SEP-2003; 2003US-0506109P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
DR WPI; 2004-487902/46.
XX
PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
PS Example; SEQ ID NO 1; 104pp; English.
XX
CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1089
ADR32355/c
ID ADR32355 standard; DNA; 18 BP.
XX
AC ADR32355;
XX
DT 04-NOV-2004 (first entry)
XX
DE Rat KDR cytosolic domain cloning RT-PCR primer.
XX
KW Rat; receptor tyrosine kinase; KDR; therapy; cancer;
KW ischaemic ocular disease; proliferative retinopathy; inflammation;
KW reverse transcription; RT; PCR; primer; ss.
XX
OS Rattus norvegicus.
XX
FN WO2004070004-A2.
XX
PD 19-AUG-2004.
XX
PF 23-JAN-2004; 2004WO-US001928.
XX
PR 29-JAN-2003; 2003US-0443335P.
XX
PA (MERI ) MERCK & CO INC.
XX
PI Thomas RA, Pan B, Mcgaughey GB;
XX
DR WPI; 2004-604425/58.
XX
PT New nucleic acid molecules encoding rat KDR protein, useful for
PT identifying inhibitors of KDR activity for treating cancer, ischemic
PT ocular diseases, and inflammation.
XX
PS Example 2; Page 30; 77pp; English.
XX
CC The invention relates to rat receptor tyrosine kinase (KDR) and its
CC corresponding nucleic acid sequence. The nucleic acid molecules of the
CC invention are useful for identifying compounds that modulate wild-type
CC rat KDR activity to evaluate the safety and efficacy of specific
CC inhibitors of KDR in rats. KDR inhibitors are useful for treating cancer,
CC ischaemic ocular diseases such as proliferative retinopathy and
CC inflammation. The present sequence is a reverse transcription (RT) PCR
CC primer used for cloning rat KDR cytosolic domain. This sequence is used
CC in the exemplification of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1090
ADR57967/c
ID ADR57967 standard; DNA; 18 BP.
XX
AC ADR57967;
XX
DT 18-NOV-2004 (first entry)
XX
DE Nucleotide #4 for signal amplification method.
XX
KW ss; signal amplification method; gene expression; reverse transcription;
KW self-assembly reaction; DNA chip.
XX
OS Unidentified.
XX
FN WO2004072302-A1.
XX
PD 26-AUG-2004.
XX

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PF 13-FEB-2004; 2004WO-JF001588.
XX
PR 14-FEB-2003; 2003JP-00037212.
XX
PA (PALM-) PALMA BEEZ RES INST CO LTD.
PI Usui M, Fujikawa T;
XX
DR WPI; 2004-642306/62.
XX
PT Signal amplification method for detecting expressed gene, by using
PT reverse transcription reaction and self-assembly reaction of
PT oligonucleotide probes.
XX
XX
PS Disclosure; SEQ ID NO 4; 27pp; Japanese.
XX
CC The invention relates to a signal amplification method (M1) for detecting
CC expressed gene using reverse transcription reaction and a self-assembly
CC reaction of forming a self assembly of oligonucleotide probes, thus
CC improving detection sensitivity of the expressed gene in a DNA chip. (M1)
CC is useful for signal amplification method (M1) for detecting expressed
CC gene (claimed). (M1) improves detection sensitivity of the expressed gene
CC in a DNA chip (claimed). (M1) does not require use of expensive enzymes
CC and enables detection corresponding to the original RNA length or
CC expression amount because of using neither linear amplification nor PCR.
CC This sequence corresponds to a nucleotide used in the method of the
CC invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1091
ADT55010/c
ID ADT55010 standard; RNA; 18 BP.
XX
AC ADT55010;
XX
XX 30-DEC-2004 (first entry)
XX
DE Amplified RNA (arRNA) preparation method-related RNA sequence #1.
XX
KW amplified RNA preparation; nervous system disorder;
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
KW multiple sclerosis; psychiatric disorder; schizophrenia;
KW affective disorder; manic depression; lack of appetite control;
KW attention deficit disorder; cancer cell detection; ss.
XX
OS Synthetic.
XX
XX WO2004085681-A2.
XX
XX 07-OCT-2004.
XX
XX 19-MAR-2004; 2004WO-US008553.
XX
XX 21-MAR-2003; 2003US-0456825P.
XX
XX (ARCT-) ARCTURUS BIOSCIENCE INC.
XX
XX Erlander MG, Salunga RC, Ma X, Enright E;
XX
XX WPI; 2004-710328/69.
XX
XX Preparing amplified RNA (arRNA) sequences present in single stranded or
XX made single stranded target polynucleotide(s), useful for detecting
XX cancer cells, comprises transcribing double stranded cDNA templates with
XX an RNA polymerase.
XX
XX Example 1; Fig 1; 46pp; English.

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```

PT cancer cells, comprises transcribing double stranded cDNA templates with
PT an RNA polymerase.
XX
XX Disclosure; Fig 2; 46pp; English.
XX
XX The invention comprises a method of preparing amplified RNA (arRNA)
XX sequences present in one or more target polynucleotide that is single
XX stranded or made single stranded. The method involves forming double
XX stranded cDNA templates containing sequences present in the target
XX polynucleotide and transcribing the cDNA templates with an RNA polymerase
XX capable of initiating transcription via the promoter region to produce
XX amplified RNA containing sequences of the target polynucleotide. The
XX method of the invention is useful for amplifying the population of RNAs
XX extracted from formalin-fixed tissues and/or the population of mRNA
XX splice variants. The method is also useful for determining gene
XX expression in neuronal and non-neuronal cells involved in disorders of
XX the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
XX disease, Alzheimer's disease, and multiple sclerosis); psychiatric
XX disorders (e.g. schizophrenia); and affective disorders (e.g. manic
XX depression, lack of appetite control, and attention deficit disorder).
XX The method of the invention may also be used to detect cancer cells, and
XX to facilitate diagnosis/prognosis of cancer in a patient. The present RNA
XX sequence is shown in a figure exemplifying the method of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1092
ADT55008
ID ADT55008 standard; DNA; 18 BP.
XX
AC ADT55008;
XX
XX 30-DEC-2004 (first entry)
XX
XX Amplified RNA (arRNA) preparation method-related DNA sequence #4.
XX
KW amplified RNA preparation; nervous system disorder;
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
KW multiple sclerosis; psychiatric disorder; schizophrenia;
KW affective disorder; manic depression; lack of appetite control;
KW attention deficit disorder; cancer cell detection; ds.
XX
OS Synthetic.
XX
XX WO2004085681-A2.
XX
XX 07-OCT-2004.
XX
XX 19-MAR-2004; 2004WO-US008553.
XX
XX 21-MAR-2003; 2003US-0456825P.
XX
XX (ARCT-) ARCTURUS BIOSCIENCE INC.
XX
XX Erlander MG, Salunga RC, Ma X, Enright E;
XX
XX WPI; 2004-710328/69.
XX
XX Preparing amplified RNA (arRNA) sequences present in single stranded or
XX made single stranded target polynucleotide(s), useful for detecting
XX cancer cells, comprises transcribing double stranded cDNA templates with
XX an RNA polymerase.
XX
XX Example 1; Fig 1; 46pp; English.

```

XX CC The invention comprises a method of preparing amplified RNA (arNA)
 CC sequences present in one or more target polynucleotide that is single
 CC stranded or made single stranded. The method involves forming double
 CC stranded cDNA templates containing sequences present in the target
 CC polynucleotide and transcribing the cDNA templates with an RNA polymerase
 CC capable of initiating transcription via the promoter region to produce
 CC amplified RNA containing sequences of the target polynucleotide. The
 CC method of the invention is useful for amplifying the population of rNAs
 CC extracted from formalin-fixed tissues and/or the population of mRNA
 CC splice variants. The method is also useful for determining gene
 CC expression in neuronal and non-neuronal cells involved in disorders of
 CC the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
 CC disease, Alzheimer's disease, and multiple sclerosis); psychiatric
 CC disorders (e.g. schizophrenia); and affective disorders (e.g. manic
 CC depression, lack of appetite control, and attention deficit disorder).
 CC The method of the invention may also be used to detect cancer cells, and
 CC to facilitate diagnosis/prognosis of cancer in a patient. The present DNA
 CC sequence is shown in a figure exemplifying the method of the invention.

XX SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1093
 ADN30833/c
 ID ADN30833 standard; DNA; 18 BP.
 XX AC ADN30833;
 XX DT 13-JAN-2005 (first entry)
 XX DE PCR primer, SEQ 112.
 XX KW Virucide; Vaccine; influenza virus infection;
 KW influenza virus replication; short interfering RNA; siRNA;
 KW short hairpin RNA; shRNA; ss; PCR; primer.
 XX OS Synthetic.
 XX PN WO2004028471-A2.
 XX PD 08-APR-2004.
 XX PF 29-SEP-2003; 2003WO-US030502.
 XX PR 28-SEP-2002; 2002US-0414457P.
 XX PR 10-FEB-2003; 2003US-0446377P.
 XX PA (NASI) MASSACHUSETTS INST TECHNOLOGY.
 XX PI Chen J, Eisen HN, Ge Q;
 XX DR WPI; 2004-305101/28.
 XX PT New composition comprising an siRNA or shRNA targeted to an agent-
 PT specific transcript, useful for treating or preventing influenza virus
 PT replication, pathogenicity or infectivity.
 XX PS Example 4; Page 107; 241pp; English.
 XX CC The present invention relates to compositions for inhibiting influenza
 CC infection and/or replication. The compositions comprise a short
 CC interfering RNA (siRNA) or short hairpin RNA (shRNA) targeted to a target
 CC transcript, which is an agent-specific transcript involved in infection
 CC by or replication of influenza A or B virus. The target transcript

CC encodes a protein consisting of hemagglutinin, neuraminidase, membrane
 CC protein 1, membrane protein 2, nonstructural protein 1, nonstructural
 CC protein 2, polymerase protein PB1, polymerase protein PB2, polymerase
 CC protein PA or polymerase protein NP. The composition is useful for
 CC treating or preventing influenza virus replication, pathogenicity or
 CC infectivity. The present sequence is a PCR primer used during siRNA
 CC preparation.

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1094
 ADU90255/c
 ID ADU90255 standard; DNA; 18 BP.
 XX AC ADU90255;
 XX DT 10-FEB-2005 (first entry)
 XX DE Allergic response suppressor oligonucleotide #939.
 XX KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX OS Synthetic.
 XX PN US2004235774-A1.
 XX PD 25-NOV-2004.
 XX PF 23-APR-2004; 2004US-00831778.
 XX PR 03-FEB-2000; 2000US-0179991P.
 XX PR 02-FEB-2001; 2001US-00776479.
 XX PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX PI Bratzler RL, Petersen DM, Fouron Y;
 XX DR WPI; 2004-833006/82.
 XX PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.
 XX PS Disclosure; SEQ ID NO 939; 235pp; English.
 XX CC The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an
 CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other
 CC medicaments. They can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1095
 ADU90229/c
 ID ADU90229 standard; DNA; 18 BP.
 AC
 XX ADU90229;
 XX
 DT 10-FEB-2005 (first entry)
 XX
 DE Allergic response suppressor oligonucleotide #913.
 XX
 KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX
 OS Synthetic.
 XX
 PN US2004235774-A1.
 XX
 PD 25-NOV-2004.
 XX
 PF 23-APR-2004; 2004US-00831778.
 XX
 PR 03-FEB-2000; 2000US-0179991P.
 PR 02-FEB-2001; 2001US-00776479.
 XX
 PA (BRATZLER R L.
 PA (PETE)/ PETERSEN D M.
 PA (FOUR)/ FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 XX
 DR WPI; 2004-833006/82.
 XX
 KW Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.
 XX
 PS Disclosure; SEQ ID NO 913; 235pp; English.

The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using an immunostimulatory nucleic acid alone or in combination with other medicaments. They can also be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the method of the invention.

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ADX56134/c
 ID ADX56134 standard; DNA; 18 BP.
 XX
 AC ADX56134;
 XX
 DT 21-APR-2005 (first entry)
 XX
 DE Novel recombinant Sabin type 1 poliovirus vector-related PCR primer #13.
 XX
 KW vaccine; Sabin type 1 poliovirus; vector; poliovirus infection; PCR;
 KW primer; ss.
 XX
 OS Unidentified.
 XX
 PN KR2004050346-A.
 XX
 PD 16-JUN-2004.
 XX
 PF 10-DEC-2002; 2002KR-00078158.
 XX
 PR 10-DEC-2002; 2002KR-00078158.
 XX
 PA (CREA-) CREAGENE INC.
 XX
 PI Bae YS, Jung HR, Kim DY, Kim GT, Lee DS, Lee SG;
 XX
 DR WPI; 2004-715997/70.
 XX
 PD Recombinant sabin type 1 poliovirus vector and recombinant vaccine
 PT composition against poliovirus.
 XX
 PS Example; Page 14; 32pp; Korean.

This invention relates to a novel recombinant Sabin type 1 poliovirus vector and a recombinant vaccine composition against poliovirus, which may induce the formation of neutralizing antibodies against Sabin types 1, 2 and 3 polioviruses, and prevent the side-effects of Opv (attenuated oral polio vaccine, Sabin). The present sequence is that of a PCR primer which was used during the development of the novel recombinant Sabin type 1 poliovirus vector of the invention.

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1097
 ADV11817/c
 ID ADV11817 standard; DNA; 18 BP.
 XX
 AC ADV11817;
 XX
 DT 24-MAR-2005 (revised)
 DT 24-FEB-2005 (first entry)
 XX
 DE Poly (dT)12-18 oligo, SEQ ID NO:150, used in first strand cDNA synthesis.
 XX
 KW Antisense therapy; thioredoxin inhibitor; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 13..18
 FT /*tag= a
 FT /note= "Optionally and serially deleted"
 XX
 PN US2004241717-A1.

XX PD 02-DEC-2004.

XX AC 10-FEB-2004; 2004US-00776933.

XX PF 10-FEB-2003; 2003US-0446374P.

XX PR (SANT-) SANTARIS PHARMA AS.

XX PA Hansen B, Thru CA, Westergaard M, Petersen KD, Wissenbach M;

XX PI WPI; 2005-056301/06.

XX DR Novel compound useful for modulating expression of gene involved in

XX FT cancer disease, or for modulating red blood cell proliferation, cellular

XX FT proliferation, ion metabolism or glucose and energy metabolism.

XX PS Example 6; SEQ ID NO 150; 92pp; English.

XX CC The invention relates to antisense oligonucleotides consisting of 8-50

CC nucleotides and/or nucleotide analogs which inhibit expression of the

CC putative human oncogene thioresoxin (TRX). The antisense oligonucleotides

CC comprise a subsequence of 8 or more nucleotides or nucleotide analogs,

CC wherein the subsequence is located within a sequence selected from

CC ADV1669-ADV11724. The oligonucleotides preferably contain at least

CC nucleotide analog, especially a locked nucleic acid (LNA) or a modified

CC nucleobase selected from 5-methylcytosine, isocytosine,

CC pseudocytosine, 5-bromouracil, 5-propynyluracil, 6-aminopurine, 2-

CC aminopurine, inosine, diaminopurine and 2-chloro-6-aminopurine. The

CC invention also relates to a conjugate comprising a TRX antisense

CC oligonucleotide of the invention and one or more non-nucleotide or non-

CC polynucleotide moieties covalently attached to the oligonucleotide; and a

CC pharmaceutical composition comprising a TRX antisense oligonucleotide or

CC conjugate of the invention, optionally further comprising a

CC chemotherapeutic agent, an antiinflammatory compound or an antiviral

CC compound. The TRX antisense oligonucleotides, and conjugates and

CC compositions containing them, are useful in the treatment of cancers such

CC as carcinomas (e.g., malignant melanoma, basal cell carcinoma, ovarian

CC carcinoma, breast carcinoma, non-small cell lung cancer, renal cell

CC carcinoma, bladder carcinoma, recurrent superficial bladder cancer,

CC stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung

CC carcinoma, cervical carcinoma, cervical dysplasia, laryngeal

CC papillomatosis, colon carcinoma, colorectal carcinoma and carcinoma

CC tumors); sarcomas (e.g., osteosarcoma, Ewing's sarcoma, chondrosarcoma,

CC malignant fibrous histiocytoma, fibrosarcoma, and Kaposi's sarcoma); or

CC gliomas. The TRX antisense oligonucleotides are also useful in the

CC treatment of conditions such as atherosclerosis, psoriasis, diabetic

CC retinopathy, rheumatoid arthritis, asthma, warts, and allergic

CC dermatitis. They may additionally be used for inhibiting cellular

CC proliferation and for modulating red blood cell proliferation, ion

CC metabolism, glucose and energy metabolism, pH regulation, matrix

CC metabolism, apoptosis, cytokinesis or the cell cycle. The TRX antisense

CC oligonucleotides of the invention have increased specificity and affinity

CC for TRX mRNA, and are resistant to degradation. The present sequence

CC represents a poly (dT)12-18 oligonucleotide used in first strand

CC synthesis of human thioresoxin cDNA in an example of the invention.

CC Revised record issued on 24-MAR-2005 : Correction to organism field

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1098

ADW10182/c

ID ADW10182 standard; DNA; 18 BP.

XX AC ADW10182;

XX DT 07-APR-2005 (first entry)

XX DE Poly (dT)12-18 oligo, SEQ ID NO:741, used in first strand cDNA synthesis.

XX KW Antisense therapy; apoptosis stimulation; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT misc_feature 13..18

FT /*tag= a

FT /note= "Optionally and serially deleted"

XX US2005014712-A1.

XX PD 20-JAN-2005.

XX PF 10-FEB-2004; 2004US-00776934.

XX PR 10-FEB-2003; 2003US-0446372P.

XX PR 19-NOV-2003; 2003US-0523591P.

XX (HANS/) HANSEN B.

PA (THRU/) THRU C A.

PA (WEST/) WESTERGAARD M.

PA (PETE/) PETERSEN K D.

PA (WISS/) WISSENBACH M.

XX Hansen B, Thru CA, Westergaard M, Petersen KD, Wissenbach M;

XX WPI; 2005-1006663/11.

XX New oligomeric compound for the modulation of survivin, useful for

PT treating e.g. cancers, atherosclerosis, psoriasis, diabetic retinopathy,

PT rheumatoid arthritis, asthma, warts, or allergic dermatitis.

XX Example 6; SEQ ID NO 741; 264pp; English.

XX CC The invention relates to antisense oligonucleotides consisting of 8-50

CC nucleotides and/or nucleotide analogs which inhibit expression of human

CC survivin, an inhibitor of apoptosis which is also essential for cell

CC division and angiogenesis. The antisense oligonucleotides comprise a

CC subsequence of 8 or more nucleotides or nucleotide analogs, wherein the

CC subsequence is located within a sequence selected from ADW09444-ADW09586.

CC The oligonucleotides preferably contain one or more (preferably 6-10)

CC nucleotide analogs, especially a locked nucleic acid (LNA), and also

CC preferably contain a linkage group selected from a phosphate group, a

CC phosphorothioate group or a boranophosphate group. The invention also

CC relates to a conjugate comprising a survivin antisense oligonucleotide of

CC the invention and one or more non-nucleotide or non-polynucleotide

CC moieties covalently attached to the oligonucleotide; and a pharmaceutical

CC composition comprising a survivin antisense oligonucleotide or conjugate

CC of the invention, optionally further comprising a chemotherapeutic agent.

CC The survivin antisense oligonucleotides, and conjugates and compositions

CC containing them, are useful in the treatment of cancers such as

CC carcinomas (e.g., malignant melanoma, basal cell carcinoma, ovarian

CC carcinoma, breast carcinoma, non-small cell lung cancer, renal cell

CC carcinoma, bladder carcinoma, recurrent superficial bladder cancer,

CC stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung

CC carcinoma, cervical carcinoma, cervical dysplasia, laryngeal

CC papillomatosis, colon carcinoma, colorectal carcinoma and carcinoma

CC tumors); sarcomas (e.g., osteosarcoma, Ewing's sarcoma, chondrosarcoma,

CC malignant fibrous histiocytoma, fibrosarcoma, and Kaposi's sarcoma); or

CC gliomas. The survivin antisense oligonucleotides are also useful in the

CC treatment of conditions such as atherosclerosis, psoriasis, diabetic

CC retinopathy, rheumatoid arthritis, asthma, warts, and allergic

CC dermatitis. They may additionally be used for inhibiting cellular

CC proliferation, for modulating apoptosis and for treating a disease

CC related to abnormal angiogenesis. The survivin antisense oligonucleotides

CC of the invention are shorter than prior art survivin antisense

CC oligonucleotides (16-mers compared to 20-25-mers), therefore having
CC increased specificity and affinity for survivin mRNA, and also have
CC higher biostability and cell permeability. The present sequence
CC represents a poly (dT)12-18 oligonucleotide used in first strand
CC synthesis of human survivin cDNA in an example of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1099
ADW86820/c
ID ADW86820 standard; DNA; 18 BP.
XX
AC ADW86820;
XX
DT 07-APR-2005 (first entry)
XX
DE Protein labelling method sequence #21.
XX
KW DNA purification; protein engineering; diagnosis; ss.
XX
OS Unidentified.
XX
PN WO2004113530-A1.
XX
PD 29-DEC-2004.
XX
PF 18-JUN-2004; 2004WO-JP008953.
XX
PR 18-JUN-2003; 2003JP-00173634.
XX
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
PI Hashimoto H, Sasaki T;
XX
WPI; 2005-075248/08.
XX
Novel polynucleotide having ability to increase labeling efficiency of
PT labeling compound, useful for synthesizing labeled protein in presence of
PT labeling compound.
XX
PS Disclosure; Fig 7A; 140pp; Japanese.
XX
The invention relates to a polynucleotide (I) for synthesizing labeled
CC protein and having ability to increase labeling efficiency of labeling
CC compound, where protein is produced by adding labeling compound to 3',
CC terminal of sequence encoding target protein of gene template, where
CC labeling compound has label portion and acceptor portion having compound
CC capable of binding to C-terminus of label portion and translating gene
CC template in presence of labeled compound. (I) is useful for producing a
CC labeling protein, which involves preparing a gene template by adding (I)
CC to the 3'-terminal of base sequence encoding the target protein,
CC translating the gene template in the presence of the labeling compound
CC containing acceptor portion and label portion, and obtaining protein
CC synthesized in the translation system. The base sequence encoding the
CC target protein either contains the termination codon or does not contain
CC the termination codon. The labeling compound is added after the
CC initiation of the translation. The labeled protein (LPI) is useful in a
CC performance-analysis of a protein, which involves contacting the test
CC substance with (LPI), and analyzing the interaction between the protein
CC and the test substance. (I) has the ability to increase labeling
CC efficiency of a labeling compound and thus effectively produces labeled
CC protein. This sequence corresponds to a sequence used in the method of
CC the invention.

XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1100
ADW86817
ID ADW86817 standard; DNA; 18 BP.
XX
AC ADW86817;
XX
DT 07-APR-2005 (first entry)
XX
DE Protein labelling method sequence #18.
XX
KW DNA purification; protein engineering; diagnosis; ss.
XX
OS Unidentified.
XX
PN WO2004113530-A1.
XX
PD 29-DEC-2004.
XX
PF 18-JUN-2004; 2004WO-JP008953.
XX
PR 18-JUN-2003; 2003JP-00173634.
XX
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
PI Hashimoto H, Sasaki T;
XX
WPI; 2005-075248/08.
XX
Novel polynucleotide having ability to increase labeling efficiency of
PT labeling compound, useful for synthesizing labeled protein in presence of
PT labeling compound.
XX
PS Disclosure; Fig 7A; 140pp; Japanese.
XX
The invention relates to a polynucleotide (I) for synthesizing labeled
CC protein and having ability to increase labeling efficiency of labeling
CC compound, where protein is produced by adding labeling compound to 3',
CC terminal of sequence encoding target protein of gene template, where
CC labeling compound has label portion and acceptor portion having compound
CC capable of binding to C-terminus of label portion and translating gene
CC template in presence of labeled compound. (I) is useful for producing a
CC labeling protein, which involves preparing a gene template by adding (I)
CC to the 3'-terminal of base sequence encoding the target protein,
CC translating the gene template in the presence of the labeling compound
CC containing acceptor portion and label portion, and obtaining protein
CC synthesized in the translation system. The base sequence encoding the
CC target protein either contains the termination codon or does not contain
CC the termination codon. The labeling compound is added after the
CC initiation of the translation. The labeled protein (LPI) is useful in a
CC performance-analysis of a protein, which involves contacting the test
CC substance with (LPI), and analyzing the interaction between the protein
CC and the test substance. (I) has the ability to increase labeling
CC efficiency of a labeling compound and thus effectively produces labeled
CC protein. This sequence corresponds to a sequence used in the method of
CC the invention.
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;

XX DNA detection; RNA detection; FRET; hybridization; probe; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

XX /note= "OTHER= 5' Cyanine 5 fluorophore"

XX WO2005071115-A1.

XX 04-AUG-2005.

XX 21-JAN-2005; 2005WO-US001771.

XX 21-JAN-2004; 2004US-0538381P.

XX 21-JAN-2004; 2004US-0538382P.

XX (GEOR-) GEORGIA TECH RES CORP.

XX Bao G, Nitin N;

XX WPI; 2005-564227/57.

XX New activable probe set comprising a donor polymer and an acceptor polymer, useful for in vivo gene detection or for detecting a target polynucleotide.

XX Example 4; SEQ ID NO 69; 147pp; English.

XX The present invention provides compositions and methods for the detection of a target polynucleotide. A claimed probe set comprises: (a) a donor polymer comprising (i) a first polynucleotide binding domain complementary to a first region of a target polynucleotide flanked by first and second stem regions which hybridize in the absence of the target polynucleotide to form a stem-loop or random-coil structure, and (ii) a quantum dot; and (b) an acceptor polymer comprising (i) a second polynucleotide binding domain complementary to a second region of the target nucleotide flanked by first and second stem regions which hybridize in the absence of the target polynucleotide to form a stem-loop or random-coil structure, and (ii) at least one reporter. Energy transfer occurs between the donor and the reporter(s) when the donor polymer and the acceptor polymer hybridize to the target polynucleotide and the quantum dot is exposed to an exciting amount of energy. The polymers may further comprise a protein transduction domain and/or targeting signal. Preferably, at least one polymer comprises a peptide nucleic acid, a plurality of quantum dots, a linkage that is resistant to enzymatic cleavage, and a quencher. Also claimed is a molecular beacon pair comprising a donor probe and acceptor probe. A claimed method of detecting a target polynucleotide comprises delivering at least one probe pair to cell lysates, tissue extracts or the interior of a cell, and exposing the quantum dot to an exciting amount of energy, where energy transfers between the quantum dot and the reporter to produce a detectable signal when the donor probe and acceptor probe hybridize to the target polynucleotide. The detectable signal is indicative of a point mutation, deletion or insertion in the target polynucleotide, or of a pathology or predisposition to a pathology. The target polynucleotide is especially K-ras, survivin, p53, p16, DPC4 or BRCA4. Also claimed are: a method for sorting cells expressing a target nucleic acid; a method for identifying modulators of gene expression; a method for determining effectiveness of an agent on a host; a method for delivering a probe to the interior of a cell; and a method for detecting the transport and localization of a nucleic acid-protein complex in living cells. The present sequence is that of a fluorescently labeled probe, which was used as a control in a fluorescence in situ hybridization (FISH) assay in an example from the invention describing mRNA detection in living cells using dual FRET molecular beacons.

XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 18; DB 1; Length 18;

XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1104

AED75673/c

ID AED75673 standard; DNA; 18 BP.

XX AED75673;

XX 12-JAN-2006 (first entry)

XX Immunostimulatory oligonucleotide, SEQ ID 882.

XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;

KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;

KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;

KW Crohn's disease; ulcerative colitis; eczema; skin allergy;

XX contact dermatitis; ss; phosphorothioate.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..18

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

XX US2005250726-A1.

XX 10-NOV-2005.

XX 12-MAY-2005; 2005US-00127654.

XX 29-MAR-2001; 2001US-0279642P.

XX 29-MAR-2002; 2002US-00112653.

XX (IOWA) UNIV IOWA RES FOUND.

XX Krieg AM, Berg DJ;

XX WPI; 2005-768014/78.

XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor to augment T-helper1 cells like immune activation and to treat non-allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 882; 58pp; English.

XX The present invention relates to a method for augmenting T-helper 1 cells (Th1)-like immune activation in a subject. The method comprises administering an immunostimulatory nucleic acid (i) to induce Th1-like immune activation; and administering a cyclooxygenase inhibitor (ii) to inhibit prostaglandin expression, is new. The present sequence is one such immunostimulatory nucleic acid. (i) is useful for treating non-allergic inflammatory diseases such as psoriasis, inflammatory bowel diseases (Crohn's disease and ulcerative colitis), eczema, allergic contact dermatitis or latex dermatitis.

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 18; DB 1; Length 18;

XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;

XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 18 AAAAAAAAAAAAAAAAAA 1

PA (BIOT-) BIOTECHNOLOGY RES INST CMAS.
 XX Guo S, Ren M, Zhang R;
 XX WPI; 2005-659717/68.
 DR Adenosine phosphate-ribosylation-factor 1 gene in cotton and its
 PT promoter.
 PT
 XX
 XX Example 1; Page 4; 13pp; Chinese.
 PS
 CC The invention relates to one kind of ARF1 gene in cotton genome and its
 CC promoter sequence. The gene and the promoter may be preponderantly
 CC expressed in the bud, flower, fiber and boll shell. The gene and the
 CC promoter may be useful in the research of the development of cotton
 CC reproductive organ, the quality improvement and the specific expression
 CC of foreign gene in cotton reproductive organ. The present sequence
 CC represents a cotton ARF1 related PCR primer.
 CC
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1108
 AAQ7552/c
 ID AAQ7552 standard; DNA; 19 BP.
 XX
 AC AAQ7552;
 XX
 DT 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1108
 AAQ7552/c
 ID AAQ7552 standard; DNA; 19 BP.
 XX
 AC AAQ7552;
 XX
 DT 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1109
 AAQ7553/c
 ID AAQ7553 standard; DNA; 19 BP.
 XX
 AC AAQ7553;
 XX
 DT 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 1 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1110
 AAQ7554/c
 ID AAQ7554 standard; DNA; 19 BP.
 XX
 AC AAQ7554;
 XX
 DT 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.

```

XX OS Synthetic.
XX PN JP06303997-A.
XX XX
XX PD 01-NOV-1994.
XX XX
XX PF 16-APR-1993; 93JP-00112515.
XX XX
XX PR 16-APR-1993; 93JP-00112515.
XX XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX FT by digestion with restriction enzymes.
XX XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAAAAAA 2725
Db 18 TAAAAA...AAAAAAAAA 1

RESULT 1111
ABL51521
ID ABL51521 standard; DNA; 19 BP.
XX AC ABL51521;
XX DT 01-JUL-2002 (first entry)
XX DE Tailing reaction related exemplary primer dA18U SEQ ID NO:2.
XX KW Tailing reaction; tailed primer; primer; probe; identification;
XX KM detection; linear amplification scheme; chain extending enzyme;
XX XX telomerase; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_RNA 19 /*tag= a
XX FT
XX XX US2002031776-A1.
XX PN
XX PD 14-MAR-2002.
XX XX
XX PF 26-JUL-2001; 2001US-00917138.
XX XX
XX PR 28-MAY-1999; 99US-0136545P.
XX PR 25-MAY-2000; 2000US-00580358.
XX XX
XX PA (TULL/) TULLIS R H.
XX PA (STRE/) STREIFEL J A.
XX XX
XX PI Tullis RH, Streifel JA;

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XX WPI; 2002-361176/39.
XX DR
XX XX
XX PT Identifying and detecting nucleic acids, particularly DNA hybridization
XX FT probes, involves employing chain extending enzymes (e.g. telomerase) to
XX FT elongate probes to render them readily detectable.
XX PS Example 1; Page 5; 10pp; English.
XX XX
XX CC The present invention describes a method for detecting a nucleic acid
XX CC probe, which comprises using chain extending enzymes to elongate probes.
XX CC The method comprises: (a) treating the sample with a chain terminating
XX CC reagent to prevent polynucleotide chain growth from the nucleic acid in
XX CC the sample; (b) contacting the sample with the probe containing a
XX CC terminus capable of elongation by a chain extending enzyme, where the
XX CC probe hybridises to the nucleic acid in the sample; (c) contacting the
XX CC sample with a chain extending enzyme and its substrates, which elongates
XX CC the probe; and (d) detecting the elongated hybridised probe. Also
XX CC described is a method comprising: (a) treating nucleic acid molecules or
XX CC modified nucleic acids in a sample with a reagent or reagents that render
XX CC the nucleic acid chains unextendable by a non-template-dependent enzyme;
XX CC (b) hybridising the treated molecules with a nucleic acid probe that
XX CC includes an extendable terminus, under conditions where hybrids form; and
XX CC (c) treating any hybrids formed with a non-template dependent chain
XX CC elongating enzyme and its substrates, where any hybridised probe is
XX CC extended. The method is useful for identifying and detecting nucleic
XX CC acids, particularly DNA hybridisation probes. The present sequence
XX CC represents a tailing reaction exemplary primer, which is used in an
XX CC example from the present invention
XX XX
XX SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA...AAAAAAAAA 2726
Db 1 AAAAAA...AAAAAAAAA 18

RESULT 1112
ABZ75398/c
ID ABZ75398 standard; DNA; 19 BP.
XX AC ABZ75398;
XX XX
XX DT 07-MAY-2003 (first entry)
XX XX
XX DE Synthetic nuclease-resistant oligomeric compound #54.
XX XX Nuclease resistant; ds; pharmaceutical; topical administration;
XX KW transdermal patch; enzymatic degradation resistant.
XX XX
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 19 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phenoxazine"
XX PN
XX PD WO2003004602-A2.
XX XX
XX PF 16-JAN-2003.
XX XX
XX PR 01-JUL-2002; 2002WO-US020934.
XX XX
XX PR 03-JUL-2001; 2001US-0102682P.
XX PR 28-NOV-2001; 2001US-00996292.
XX PR 10-DEC-2001; 2001US-00013295.
XX XX
XX PA (ISIS-) ISIS PHARM INC.

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XX PI Manoharan M, Maier MA, Prakash TP, Rajeev KG;
XX DR WPI; 2003-256318/25.
XX PT Nuclease-resistant oligomeric compound useful as pharmaceuticals for
XX PT topical administration such as transdermal patches.
XX PS Disclosure; Page 234; 234pp; English.
XX CC The invention relates to novel nuclease-resistant oligomeric compounds.
XX CC The compounds of the invention are useful as pharmaceuticals for topical
XX CC administration such as transdermal patches. The oligomeric compound is
XX CC resistant to enzymatic degradation. The sequences shown in ABZ75345-
XX CC ABZ75399 represent the nuclease-resistant compounds of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match      0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1113
ABZ75399/c
ID ABZ75399 standard; DNA; 19 BP.
XX AC ABZ75399;
XX DT 07-MAY-2003 (first entry)
XX DE Synthetic nuclease-resistant oligomeric compound #55.
XX KW Nuclease resistant; ds; pharmaceutical; topical administration;
XX KW transdermal patch; enzymatic degradation resistant.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 19 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "G-clamp modification"
XX PN WO2003004602-A2.
XX PD 16-JAN-2003.
XX PF 01-JUL-2002; 2002WO-US020934.
XX PR 03-JUL-2001; 2001US-0302682P.
XX PR 28-NOV-2001; 2001US-00998292.
XX PR 10-DEC-2001; 2001US-00013295.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Maier MA, Prakash TP, Rajeev KG;
XX DR WPI; 2003-256318/25.
XX PT Nuclease-resistant oligomeric compound useful as pharmaceuticals for
XX PT topical administration such as transdermal patches.
XX PS Disclosure; Page 234; 234pp; English.
XX CC The invention relates to novel nuclease-resistant oligomeric compounds.
XX CC The compounds of the invention are useful as pharmaceuticals for topical
XX CC administration such as transdermal patches. The oligomeric compound is
XX CC resistant to enzymatic degradation. The sequences shown in ABZ75345-

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CC ABZ75399 represent the nuclease-resistant compounds of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match      0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1114
ADG85220/c
ID ADG85220 standard; DNA; 19 BP.
XX AC ADG85220;
XX DT 11-MAR-2004 (first entry)
XX DE Oligo dT primer to amplify cytochrome P450 gene fragments.
XX KW cytochrome P450 gene; tobacco; phenotype; transgenic plant; nornicotine;
XX KW primer; ss.
XX OS Nicotiana sp.
XX PN WO2003078577-A2.
XX PD 25-SEP-2003.
XX PF 12-MAR-2003; 2003WO-US007430.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PA (USSM-) US SMOKELESS TOBACCO CO.
XX PI Xu D;
XX DR WPI; 2003-902814/82.
XX PT New isolated nucleic acid molecule comprising a fragment of cytochrome
XX PT P450, useful for altering plant phenotypes, and for producing transgenic
XX PT plants containing high nornicotine levels.
XX PS Disclosure; SEQ ID NO 154; 81pp; English.
XX CC The invention relates to the isolation of nucleic acid molecules
XX CC comprising fragments of a cytochrome P450 gene from Nicotiana plants or
XX CC molecule that have at least 75% or 99% identity to the sequences. The
XX CC nucleic acid molecules are useful for altering plant phenotypes, and for
XX CC producing transgenic plants containing high nornicotine levels. This
XX CC sequence represents a PCR primer used to isolate the fragments of the
XX CC genes of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match      0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1115
ADG28486/c
ID ADG28486 standard; DNA; 19 BP.
XX AC ADG28486;
XX
```

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DT XX 26-FEB-2004 (first entry)
DE XX Modified oligonucleotide seq id 7.
KW antibacterial; protozoacide; antialgal; fungicide;
KW internucleotide linkage; 2',5'-internucleotide linkage; 3'-substituent;
KW antisense; pharmaceutical; RNA-DNA transcription;
KW RNA-protein translation; infection; diagnostic; therapeutic;
KW nuclease resistance; ss.
XX OS Synthetic.
XX OS US6653458-B1.
XX PN 25-NOV-2003.
XX PD 08-NOV-1999; 99US-00435806.
XX PF 03-SEP-1993; 93US-00117363.
XX PR 02-SEP-1994; 94WO-US010131.
XX PR 28-FEB-1996; 96US-00602862.
XX PR 14-JUL-1998; 98US-00115043.
XX XX (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD, Guinasso CJ;
XX XX WPI; 2004-079586/08.
XX XX New oligonucleotide comprising at least one 2',5'-internucleotide linkage
XX PT useful for treating organisms having disease caused by undesired
XX PT production of protein e.g. bacteria, yeast, protozoa and algae.
XX XX Example 54; SEQ ID NO 7; 30pp; English.
XX XX The invention describes an oligonucleotide comprising several nucleotides
XX CC covalently linked together by internucleotide linkages. At least one of
XX CC the nucleotides is linked to an adjacent nucleotide by 2',5'-
XX CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
XX CC are useful as antisense oligonucleotides; in pharmaceutical compositions
XX CC ; for treating organisms having disease caused by undesired production of
XX CC protein e.g. organism that utilises RNA-DNA transcription or RNA-protein
XX CC translation, bacteria, yeast, protozoa, algae and warm-blooded animals;
XX CC for developing diagnostic and therapeutic agents. The modified
XX CC oligonucleotide exhibits improved properties of nuclease resistance and
XX CC binding affinity. The oligonucleotides are easy to synthesise and exhibit
XX CC good properties of nuclease resistance and hybridisation to target
XX CC nucleic acids. The oligonucleotide is potent antisense agent with longer
XX CC duration of action. This sequence represents an oligonucleotide of the
XX CC invention.
XX XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX XX
XX XX Query Match 0.7%; Score 18; DB 1; Length 19;
XX XX Best Local Similarity 100.0%; Pred. No. 8.9e+02;
XX XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1116
AD059144/c
ID ADO59144 standard; DNA; 19 BP.
XX ADO59144;
XX AC ADO59144;
XX XX 09-SEP-2004 (first entry)
XX XX Tobacco cytochrome P450 PCR primer #14.
DE ss; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX KW

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XX OS Nicotiana sp.
XX XX US2004117869-A1.
XX PN 17-JUN-2004.
XX PD 12-MAR-2003; 2003US-00387346.
XX PF 11-JAN-2002; 2002US-0347444P.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PR 10-JAN-2003; 2003US-00340861.
XX XX (USSM-) US SMOKELESS TOBACCO CO.
XX PA Xu D;
XX XX WPI; 2004-449487/42.
XX DR An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX PT Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX PT transgenic plants.
XX XX Disclosure; Fig 73; 82pp; English.
XX XX The invention relates to an isolated nucleic acid molecule (I),
XX CC comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX CC cytochrome P450 enzyme fragment sequences. (I) is useful for producing a
XX CC transgenic tobacco plant, which involves operably linking (I) with a
XX CC promoter functional in the plant to create a plant transformation vector,
XX CC and transforming the plant with the plant transformation vector,
XX CC selecting a plant cell transformed with the transformation vector, and
XX CC regenerating a plant from the selected plant cell. The nucleic acid
XX CC molecule is in an antisense orientation, sense orientation or is in a RNA
XX CC interference orientation. The present sequence represents a PCR primer
XX CC used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
XX CC the invention.
XX XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX XX
XX XX Query Match 0.7%; Score 18; DB 1; Length 19;
XX XX Best Local Similarity 100.0%; Pred. No. 8.9e+02;
XX XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1117
ADT55005
ID ADT55005 standard; DNA; 19 BP.
XX AC ADT55005;
XX XX 30-DEC-2004 (first entry)
XX XX Amplified RNA (aRNA) preparation method-related DNA sequence #1.
XX XX amplified RNA preparation; nervous system disorder;
XX KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
XX KW multiple sclerosis; psychiatric disorder; schizophrenia;
XX KW affective disorder; manic depression; lack of appetite control;
XX KW attention deficit disorder; cancer cell detection; ds.
XX OS Synthetic.
XX XX Key Location/Qualifiers
XX FH misc_difference 1
XX FT /*tag= a
XX FT /note= "N represents a T7 RNA polymerase promoter
XX FT sequence"
XX XX

```

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PN WO2004085681-A2.
XX
PD 07-OCT-2004.
XX
XX 19-MAR-2004; 2004WO-US008553.
XX PF
XX 21-MAR-2003; 2003US-0456825P.
XX PR
XX (ARCT-) ARTURUS BIOSCIENCE INC.
XX PA
XX Erlander MG, Salunga RC, Ma X, Enright E;
XX PI
XX WPI; 2004-710328/69.
XX DR
XX
XX Preparing amplified RNA (aRNA) sequences present in single stranded or
PT made single stranded target polynucleotide(s), useful for detecting
PT cancer cells, comprises transcribing double stranded cDNA templates with
PT an RNA polymerase.
XX
XX Example 1; Fig 1; 46pp; English.
XX
XX The invention comprises a method of preparing amplified RNA (aRNA)
CC sequences present in one or more target polynucleotide that is single
CC stranded or made single stranded. The method involves forming double
CC stranded cDNA templates containing sequences present in the target
CC polynucleotide and transcribing the cDNA templates with an RNA polymerase
CC capable of initiating transcription via the promoter region to produce
CC amplified RNA containing sequences of the target polynucleotide. The
CC method of the invention is useful for amplifying the population of RNAs
CC extracted from formalin-fixed tissues and/or the population of mRNA
CC splice variants. The method is also useful for determining gene
CC expression in neuronal and non-neuronal cells involved in disorders of
CC the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
CC disease, Alzheimer's disease, and multiple sclerosis); psychiatric
CC disorders (e.g. schizophrenia); and affective disorders (e.g. manic
CC depression, lack of appetite control, and attention deficit disorder).
CC The method of the invention may also be used to detect cancer cells, and
CC to facilitate diagnosis/prognosis of cancer in a patient. The present DNA
CC sequence is shown in a figure exemplifying the method of the invention.
XX
XX Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
2 AAAAAAAAAAAAAAAAAA 19

RESULT 1118
ADY58870
ID ADY58870 standard; DNA; 19 BP.
XX
XX ADY58870;
AC
XX 19-MAY-2005 (first entry)
DT
XX Polya probe.
DE
XX Molecular beacon; DNA detection; RNA detection; probe; ss.
KW
XX Synthetic.
XX
XX WO2005021712-A2.
PN
XX 10-MAR-2005.
XX
XX 25-JUN-2004; 2004WO-US020232.
XX PF
XX 25-JUN-2003; 2003US-0482648P.
XX PR
XX 23-JUN-2004; 2004US-00874920.
XX PR

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XX (GEOR-) GEORGIA TECH RES CORP.
XX PA
XX Bao G, Nitin N, Nie S, Kim GJ;
XX PI
XX WPI; 2005-223176/23.
XX DR
XX New molecular beacon operably linked to a protein transduction domain,
PT useful in preparing a pharmaceutical composition for treating e.g.,
PT cancer.
XX
XX Example 9; SEQ ID NO 22; 91pp; English.
XX
XX The invention provides nucleic acid reporters and methods of their use.
CC The nucleic acid reporters include molecular beacons modified with
CC protein transduction domains (PTDs) to facilitate translocation of the
CC nucleic acid reporter across cellular membranes. The nucleic acid
CC reporters are also optionally modified with a targeting signal to direct
CC the nucleic acid reporter to a specific cell, tissue, organ,
CC intracellular region, organelle or vesicle. The molecular beacon can be
CC used in methods for: detecting or sorting cells expressing a target
CC nucleic acid; detecting a target nucleic acid in a host; detecting the
CC expression of a target nucleic acid in a living cell; identifying
CC modulators of gene expression; determining the effectiveness of an agent
CC on a host cell; and detecting the transport and localization of a nucleic
CC acid-protein complex in living cells. The present sequence is of a polya
CC probe. This was used as a negative control in a fluorescence in situ
CC hybridization (FISH) assay targeting GAPDH mRNA in a comparison of this
CC traditional method of detection with the method of the invention.
XX
XX Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
2 AAAAAAAAAAAAAAAAAA 19

RESULT 1119
ADZ65660/c
ID ADZ65660 standard; DNA; 19 BP.
XX
XX ADZ65660;
AC
XX 14-JUL-2005 (first entry)
DT
XX Oilgo d(T) PCR primer for amplifying p450 cDNA.
DE
XX Cytochrome p450; ss; secondary metabolite; ethylene; senescence;
KW normicotine; transgenic plant; primer.
KW
XX Synthetic.
XX
XX WO2005038033-A2.
PN
XX 28-APR-2005.
PD
XX 15-OCT-2004; 2004WO-US034065.
XX PF
XX 16-OCT-2003; 2003US-00686947.
XX PR
XX 29-APR-2004; 2004US-056235P.
XX PR
XX 03-SEP-2004; 2004US-00934944.
XX PR
XX (USSW-) US SMOKELESS TOBACCO CO.
XX PA
XX Xu D;
XX PI
XX WPI; 2005-315717/32.
XX DR
XX New nucleic acid molecule encoding cytochrome P450 enzymes in Nicotiana,
XX PT

```

PT useful in developing tobacco plants with altered phenotypes.

PS Disclosure; Fig 152; 226pp; English.

XX

CC The invention relates to an isolated nucleic acid molecule (I) from

CC Nicotiana, where the nucleic acid molecule comprising any of the 59

CC nucleic acid sequences of SEQ ID NOS: 299-357 (NOTE: The claims refer to

CC SEQ ID NOS 299-357 as nucleic acids but these sequences (apart from SEQ

CC ID NO 356) are all proteins and appear as ADZ65402-ADZ65460. The nucleic

CC acids of the invention encode cytochrome P450 enzymes whose expression is

CC induced by ethylene and/or plant senescence. Also included are a

CC transgenic plant comprising (I), a method of producing a transgenic

CC plant, a method of selecting a plant containing a nucleic acid molecule

CC (where the plant is analyzed for the presence of nucleic acid sequence of

CC ADZ65402-

XX

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1120

ADZ66018/c

ID ADZ66018 standard; DNA; 19 BP.

XX

AC ADZ66018;

XX

DT 14-JUL-2005 (first entry)

XX

DE Tobacco cytochrome P450 enzyme cDNA PCR primer #6.

XX

KW Enzyme engineering; cytochrome P450; PCR; ss; primer.

XX

OS Nicotiana tabacum.

OS Synthetic.

XX

PN W02005038018-A2.

XX

PD 28-APR-2005.

XX

PF 15-OCT-2004; 2004WO-US034218.

XX

PR 16-OCT-2003; 2003US-00686947.

XX

PR 29-APR-2004; 2004US-0366235P.

XX

PR 17-SEP-2004; 2004US-00943507.

XX

PA (USM-) US SMOKELESS TOBACCO CO.

XX

PI Xu D;

XX

DR WPI; 2005-315709/32.

XX

PT New isolated nucleic acid molecule from Nicotiana, useful for altering

PT plant phenotypes, thus producing a transgenic plant having reduced levels

PT of nornicotine.

XX

PS Disclosure; Fig 153; 203pp; English.

XX

CC The invention relates to an isolated nucleic acid molecule from

CC Nicotiana, encoding a protein. The invention also relates to a transgenic

CC plant comprising the nucleic acid molecule, a method of producing a

CC transgenic plant comprising operably linking the nucleic acid molecule

CC with a promoter functional in the plant to create a plant

CC transformational vector, transforming the plant with the plant

CC transformational vector, selecting a plant cell transformed with the

CC transformational vector and regenerating a transformation plant from the

CC transformed plant cell, a method of selecting a plant containing a

CC nucleic acid molecule, a method of increasing or decreasing nornicotine

CC levels in a plant by operably linking the nucleic acid molecule with a

CC promoter functional in the plant, a tobacco product having reduced

CC amounts of nornicotine levels, the tobacco product comprising tobacco

CC from the plant, a tobacco leaf having reduced amounts of nornicotine

CC levels and a method of isolating a gene from a plant using the isolated

CC nucleic acid. In producing a transgenic plant, the plant has reduced

CC levels of nornicotine. The tobacco product is selected from cigarettes,

CC cigars, pipe tobacco, snuff, chewing tobacco, products blended with the

CC tobacco product and their mixtures. The nucleic acid molecule is useful

CC for altering plant phenotypes, thus producing a transgenic plant having

CC reduced levels of nornicotine. This sequence represents a PCR primer used

CC to amplify cDNA encoding a tobacco cytochrome P450 enzyme of the

CC invention.

XX

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1121

AED19814/c

ID AED19814 standard; DNA; 19 BP.

XX

AC AED19814;

XX

DT 01-DEC-2005 (first entry)

XX

DE Oligonucleotide used for modulating gene transcription.

XX

KW Transcription; ss.

XX

OS Unidentified.

XX

PN US2005223422-A1.

XX

PD 06-OCT-2005.

XX

PF 23-SEP-2004; 2004US-00950321.

XX

PR 23-SEP-2003; 2003US-0505689P.

XX

PR 14-OCT-2003; 2003US-0511460P.

XX

PR 06-NOV-2003; 2003US-0518075P.

XX

PR 04-DEC-2003; 2003US-0527611P.

XX

PR 12-DEC-2003; 2003US-0529352P.

XX

PR 13-FEB-2004; 2004US-0544771P.

XX

PR 30-JUN-2004; 2004US-0583691P.

XX

(CERE-) CERES INC.

XX

PI Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;

XX

PI Pennell R, Schneeberger R, Wu C;

XX

XX WPI; 2005-664198/68.

XX

PT New isolated nucleic acid molecule capable of modulating transcription,

XX

PT or its complement, useful for transcription of polynucleotides in a host

XX

PT cell or transformed host organism.

XX

PS Disclosure; SEQ ID NO 2; 210pp; English.

XX

CC The invention relates to a nucleic acid molecule or its complement

XX

CC sequence capable of modulating transcription. The nucleic acid molecule

XX

CC of the invention is useful for transcription of polynucleotides in a host

XX

CC cell or transformed host organism. The present sequence is an

XX

CC oligonucleotide used for modulating gene transcription.


```
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1123
AED21473/c
ID AED21473 standard; DNA; 19 BP.
XX
AC AED21473;
XX
XX 01-DEC-2005 (first entry)
XX
DE Primer dTV, SEQ ID NO: 74, used to generate probes for hybridization.
XX
XX Transgenic plant; plant growth regulation; development; food;
KW agriculture; horticulture; primer; ss.
XX
XX Unidentified.
XX
XX US2005223434-A1.
PN
XX
PD 06-OCT-2005.
XX
XX 23-SEP-2004; 2004US-00950095.
XX
XX 23-SEP-2003; 2003US-0505420P.
XX
XX (CERE-) CERES INC.
XX
XX Alexandrov N, Zhihong C, Fang Y, Feldmann K, Kiegle EA, Kwok S;
PI Lu Y, Penell R, Schneeberger R, Wu C;
XX WPI; 2005-683371/70.
XX
XX New nucleotide sequences, useful modifying plant characteristics or for
PT modulating and manipulating growth, development, and biochemistry of a
PT plant.
XX
XX Disclosure; SEQ ID NO 74; 132pp; English.
XX
XX The present invention relates to polynucleotides and their encoding
CC polypeptides with the use of those products for making transgenic plants.
CC The sequences of the invention are useful modifying plant characteristics
CC or for modulating and manipulating growth, development and biochemistry
CC of a plant. The invention is useful for producing plants with increased
CC yield of biomass or chemical components, in particular food and
CC reproducible raw materials. The present sequence is a d(T)18 primer used
CC to generate probes for hybridization. This sequence is used in making
CC transgenic plants.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1123
AED60796/c
ID AED60796 standard; DNA; 19 BP.
XX
XX AED60796;
AC
```

```
XX
DT 29-DEC-2005 (first entry)
XX
XX Synthetic primer #2.
DE
XX Transcription; vector; primer; ss.
XX
XX Synthetic.
XX
XX US2005246785-A1.
PN
XX 03-NOV-2005.
XX
XX 30-SEP-2004; 2004US-00957569.
XX
XX 14-OCT-2003; 2003US-0511460P.
PR
XX 06-NOV-2003; 2003US-0518075P.
PR
XX 04-DEC-2003; 2003US-0527611P.
PR
XX 13-FEB-2004; 2004US-0544771P.
XX
XX (CERE-) CERES INC.
XX
XX Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
PI Pennell R, Schneeberger R, Wu C;
XX WPI; 2005-733852/75.
XX
XX New isolated promoter sequences and promoter control elements, useful for
PT modulating transcription of a desired polynucleotide in plants.
PT
XX Disclosure; SEQ ID NO 2; 787pp; English.
XX
XX The invention relates to an isolated nucleic acid molecule capable of
CC modulating transcription, where the nucleic acid molecule shows at least
CC 80% sequence identity to one of the promoter sequences given in the
CC specification or its complement. The invention also relates to a vector
CC construct comprising a first nucleic acid capable of modulating
CC transcription, where the nucleic acid molecule shows at least 80%
CC sequence identity to one of the promoter sequences given in the
CC specification, and a second nucleic acid having to be transcribed, where
CC the first and second nucleic acid molecules are heterologous to each
CC other and are operably linked together, a host cell comprising the
CC nucleic acid, where the nucleic acid molecule is flanked by an exogenous
CC sequence or comprising the vector construct, a method of modulating
CC transcription and a plant comprising the vector construct. The first
CC nucleic acid molecule is capable of modulating transcription during the
CC developmental times, in response to a stimulus or in a cell tissue or
CC organ as given in the specification, where the first nucleic acid
CC molecule is inserted into a plant cell and the plant cell is regenerated
CC into a plant. The nucleic acid molecules, which are promoter sequences,
CC and promoter control elements are useful for modulating transcription of
CC a desired polynucleotide in plants. This sequence represents a synthetic
CC primer used in the scope of the invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1124
AEE0814/c
ID AEE0814 standard; DNA; 19 BP.
XX
XX AEE0814;
AC
XX 26-JAN-2006 (first entry)
XX
XX
```

DE Degenerate PCR primer for cloning cytochrome p450 cDNA, SEQ ID NO: 2260.
KW Plant breeding; plant; ss; PCR; transgenic plant; senescence; primer.
XX Synthetic.
OS WO2005111217-A2.
XX
PN 24-NOV-2005.
XX
PD 27-APR-2005; 2005WO-US014803.
XX
PF 29-APR-2004; 2004US-0566235P.
XX
PR 03-SEP-2004; 2004US-00934944.
PR 03-SEP-2004; 2004US-0607357P.
PR 17-SEP-2004; 2004US-00943507.
PR 15-OCT-2004; 2004WO-US034065.
PR 15-OCT-2004; 2004WO-US034218.
PR 25-JAN-2005; 2005US-0646764P.
PR 24-MAR-2005; 2005US-0665097P.
PR 24-MAR-2005; 2005US-0665451P.
XX
PA (USSM-) US SMOKELESS TOBACCO CO.
XX
XX Xu D, Nielsen MT;
PI
XX
DR WPI; 2005-786788/80.
XX
XX
PT Producing a tobacco plant having decreased expression of a nicotine
PT demethylase gene comprises crossing a first tobacco plant with a second
PT tobacco plant and germinating the collected seed of an F1 progeny plant.
XX
XX Disclosure; SEQ ID NO 2260; 641pp; English.
PS
XX
CC The invention relates to a breeding method for producing a tobacco plant
CC with reduced expression of a nicotine demethylase gene comprising crossing
CC a first tobacco plant with variant nicotine demethylase gene expression
CC with a second tobacco plant with at least one phenotypic trait to produce
CC an F1 progeny plant, the seed of which is collected and germinated to
CC produce a tobacco plant having reduced expression of a nicotine
CC demethylase gene. Also included are breeding a nicotine demethylase
CC deficiency trait into a tobacco plant, producing a tobacco seed,
CC developing a tobacco plant in a tobacco breeding program, a tissue
CC culture of regenerable tobacco cells obtained from the tobacco plant of
CC the invention, producing a tobacco product, a breeding method for
CC producing a tobacco plant having a modified attribute, a method of
CC breeding an attribute into a tobacco plant; a tobacco plant or its
CC components produced by the method of breeding a nicotine demethylase
CC deficiency trait into a tobacco plant, producing tobacco seed, producing
CC a tobacco plant having a modified attribute or developing a tobacco plant
CC in a tobacco breeding program, an isolated genetic marker comprising a
CC nucleic acid sequence that is substantially identical to a nucleic acid
CC sequence given in the specification (the nucleic acids comprise isolated
CC cytochrome p450 cDNAs), an expression vector comprising the nucleic acid
CC sequence, a plant or plant component comprising the isolated nucleic acid
CC sequence, a plant produced from a germinated seed of the plant, reducing
CC the expression or enzymatic activity of a constitutive, or an ethylene
CC induced or senescence induced tobacco polypeptide in a plant cell, and
CC increasing the expression or enzymatic activity of a constitutive, or an
CC ethylene or senescence induced tobacco polypeptide in a plant cell. The
CC phenotypic trait comprises disease resistance, high yield, high grade
CC index, curability, curing quality, mechanical harvestability, holding
CC ability, leaf quality, height, maturation, stalk size, or leaf number per
CC plant. The breeding method for producing a tobacco plant having decreased
CC expression of a nicotine demethylase gene is useful developing desirable
CC (non-genetically engineered) germplasm. The plant is useful in producing
CC (smokeless) tobacco products. The tobacco product is a moist or dry
CC snuff, a chewing tobacco, a cigarette product, a cigar product, a
CC cigarillo, a pipe tobacco, or bidis. The p450 cDNAs were isolated using
CC degenerate PCR primers designed against cytochrome p450 motifs. The
CC present sequence is a PCR primer used to isolate the cytochrome p450
CC cDNAs of the invention.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1125
AEF26614/c
ID AEF26614 standard; DNA; 19 BP.
XX
AC AEF26614;
XX
DT 23-MAR-2006 (first entry)
XX
DE Oligo dTV primer.
XX
KW ss; primer; transgenic plant.
XX
OS Synthetic.
XX
PN US2006015970-A1.
XX
PD 19-JAN-2006.
XX
PF 09-DEC-2004; 2004US-00010239.
XX
PR 12-DEC-2003; 2003US-0529352P.
XX
XX (CERS-) CERS INC.
XX
XX Pennell R, Okamuro J, Schneeberger R, Fang Y, Kwok S, Jofuku D;
PI Kiegle EA, Donson J, Apuya N;
XX
XX WPI; 2006-099536/10.
XX
PT New nucleic acid molecule, useful in producing transgenic plants for use
PT as models for modifying plant characteristics e.g. increase in plant
PT height, number or size of leaves, or wood products.
XX
PS Example 1; SEQ ID NO 133; 245pp; English.
XX
CC The present invention relates to isolated nucleic acid molecules from
CC Arabidopsis thaliana and the polypeptides encoded by them. The patentees
CC also claim a vector construct containing such nucleic acid molecules, and
CC a host cell transformed; a method for detecting a nucleic acid in a
CC sample; and a plant, plant cell, plant material or seed of a plant which
CC comprises the nucleic acid molecule which is exogenous or heterologous to
CC the plant or plant cell. The vector construct comprises a first nucleic
CC acid having a regulatory sequence capable of causing transcription and/or
CC translation in a plant and a second nucleic acid having the sequence of
CC the isolated nucleic acid molecule. The first and second nucleic acids
CC are operably linked and where the second nucleic acid is heterologous to
CC any element in the vector construct. The isolated nucleic acid molecules
CC are useful in producing transgenic plants for use as models for modifying
CC plant characteristics, e.g. increase in plant height, number or size of
CC leaves, or wood products. The present sequence is that of a primer used
CC in generation of labeled probes from first-stand cDNA.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1126
 AEF99207/c
 ID AEF99207 standard; DNA; 19 BP.
 CC
 AC AEF99207;
 CC
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Oligo(dT) reverse RT-PCR primer, SEQ ID NO:2260.
 XX
 KW Plant breeding: crop improvement; secondary metabolite; genetic marker;
 KW reverse transcriptase PCR; RT-PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US2006041949-A1.
 XX
 PD 23-FEB-2006.
 XX
 PF 27-APR-2005; 2005US-00116881.
 XX
 PR 13-NOV-2001; 2001US-0337684P.
 PR 11-JAN-2002; 2002US-034744P.
 PR 12-MAR-2002; 2002US-0363684P.
 PR 16-OCT-2002; 2002US-0418933P.
 PR 13-NOV-2002; 2002US-00293252.
 PR 10-JAN-2003; 2003US-00340861.
 PR 12-MAR-2003; 2003US-00387346.
 PR 08-JUL-2003; 2003US-0485368P.
 PR 18-SEP-2003; 2003US-0503989P.
 PR 16-OCT-2003; 2003US-00686947.
 PR 29-APR-2004; 2004US-0566235P.
 PR 03-SEP-2004; 2004US-00934944.
 PR 17-SEP-2004; 2004US-0607357P.
 PR 15-SEP-2004; 2004US-00943507.
 PR 15-OCT-2004; 2004WO-US034065.
 PR 25-JAN-2005; 2005US-0646764P.
 PR 24-MAR-2005; 2005US-0665097P.
 PR 24-MAR-2005; 2005US-0665451P.
 PR 19-APR-2005; 2005US-00110062.
 XX
 PA (USSM-) US SMOKELESS TOBACCO CO.
 XX
 PI Xu D, Nielsen MT;
 XX
 XX WPI; 2006-182895/19.
 XX
 PT New breeding method, useful for producing a tobacco plant having
 PT decreased expression of a nicotine demethylase gene comprising crossing
 PT germinating F1 progeny seed to produce the tobacco plant.
 XX
 XX Example 3; SEQ ID NO 2260; 51lpp; English.
 XX
 CC The invention relates to a breeding method for producing a tobacco plant
 CC having decreased expression of a nicotine demethylase gene. The method
 CC involves crossing a first tobacco plant having variant nicotine
 CC demethylase gene expression with a second tobacco plant containing at
 CC least one phenotypic trait (e.g., disease resistance, high yield etc.) to
 CC produce an F1 progeny plant; collecting the seed of the F1 progeny; and
 CC germinating the seed to produce a tobacco plant having decreased nicotine
 CC demethylase expression. The invention also relates to a tobacco plant or
 CC its components produced using the method of the invention; a tissue
 CC culture of regenerable tobacco cells obtained from such plants; a tobacco
 CC product produced from such plants; and a method of breeding a tobacco
 CC plant with a modified attribute comprising variant expression of a
 CC cytochrome P450 polynucleotide (including the nicotine demethylase gene).
 CC The invention further relates to isolated constitutive, ethylene-induced
 CC or senescence-induced genetic markers comprising tobacco cytochrome P450
 CC nucleic acid molecules, including nicotine demethylase sequences; methods
 CC for reducing or increasing the expression or activity of polypeptides
 CC encoded by these nucleic acid molecules; expression vectors, plants or

plant components comprising one of these polynucleotides; and tobacco
 products produced from such plants. The methods of the invention are
 useful for the breeding (especially marker assisted breeding) of tobacco
 plants with decreased nicotine demethylase expression or with altered
 cytochrome P450 expression or activity. Altered expression of such
 enzymes can result in a change in the composition of secondary
 metabolites such as alkaloids (e.g., nicotine), phenylpropanoids,
 terpenoids, lipids, cyanogenic glycosides and glucosinolates, with
 effects on the flavor or aroma of plant products. They may also affect
 herbicide tolerance, resistance to disease or insects, quality factors
 related to undesirable constituents, structural traits, fiber content,
 leaf yield, ripening, leaf curing or storage properties. Tobacco plants
 of the invention in which the expression of cytochrome P450 genes is
 altered may have desirable traits such as altered levels of nicotine
 or N'-nitrosonicotine. Such plants can be used in the production of
 tobacco products such as moist or dry snuff, chewing tobacco, cigarettes,
 cigars, cigarillos, pipe tobacco, bidis or smokeless tobacco products.
 Sequences AEF99202-AEF99206 represent PCR primers used in the cloning of
 tobacco cytochrome P450 cDNAs. Note: The sequence data for this patent is
 also available in electronic format directly from the US patent office at
 seqdata.uspto.gov/sequence.html?DocID=20060041949.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1127
 AAQ75586/c
 ID AAQ75586 standard; DNA; 20 BP.
 XX
 AC AAQ75586;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 DR WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 1lpp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

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XX SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1128
AAQ75588/C
ID AAQ75588 standard; DNA; 20 BP.
XX AC
XX AAQ75588;
XX DT
XX 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX FT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1129
AAQ75583/C
ID AAQ75583 standard; DNA; 20 BP.
XX AC
XX AAQ75583;
XX DT
XX 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.

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XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX FT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1130
AAQ75590/C
ID AAQ75590 standard; DNA; 20 BP.
XX AC
XX AAQ75590;
XX DT
XX 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX FT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.

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PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

  Query Match      0.7%; Score 18; DB 1; Length 20;
  Best Local Similarity 100.0%; Pred. No. 9.1e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1131
AAQ75582/C
ID AAQ75582 standard; DNA; 20 BP.
XX
AC AAQ75582;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
DE Analysis of cDNA and gene expression - by amplification of mRNA followed
DE by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 3 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

  Query Match      0.7%; Score 18; DB 1; Length 20;
  Best Local Similarity 100.0%; Pred. No. 9.1e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1133
AAQ75587/C
ID AAQ75587 standard; DNA; 20 BP.
XX
AC AAQ75587;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.

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XX PR 16-APR-1993; 93JP-00112515.
 XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX DR WPI; 1995-018287/03.
 XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 XX PT by digestion with restriction enzymes.
 XX PS Disclosure; Page 5; 11pp; Japanese.
 XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 XX CC and using the aggregate of mRNAs as the template for each reverse
 XX CC transcription primer; (b) digesting each of the prepared aggregates of
 XX CC the double-stranded cDNAs with restriction enzyme and; (c)
 XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 XX CC method can be used to analyse gene expression rapidly and easily
 XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1134
 ABZ88694
 ID ABZ88694 standard; DNA; 20 BP.
 AC ABZ88694;
 XX 17-OCT-2003 (first entry)
 XX Human oligonucleotide sequence.
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 XX antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
 XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
 XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 XX lung inflammation; respiratory disease; ds.
 OS Homo sapiens.
 XX WO200285308-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX Pharmaceutical composition for treating ailments associated with impaired
 XX PT respiration, has oligo(s) antisense to specific gene(s) or its
 XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 XX PT ubiqunone.
 XX PS Disclosure; SEQ ID NO 3936; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 XX CC first active agent comprising an oligonucleotide antisense to the
 XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 XX CC junctions of genes encoding a polypeptide associated with lung and/or
 XX CC nasal airway dysfunction and a second active agent comprising an
 XX CC antiinflammatory steroid and ubiqunone. A composition of the invention
 XX CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 XX CC immunosuppressive, and cytostatic activity. The composition may have a
 XX CC use in antisense gene therapy. The composition is useful for treating or
 XX CC preventing a respiratory, lung or malignant disease or condition, also
 XX CC for enhancing the prophylactic or therapeutic respiratory effect of an
 XX CC antiinflammatory steroid in a subject, for reducing or depleting levels
 XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 XX CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 XX CC lung inflammation, lung allergies, or a respiratory disease or condition.
 XX CC Note: The sequence data for this patent is not represented in the printed
 XX CC specification, but was obtained in electronic format directly from WIPO
 XX CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 3 TAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 1135
 ADH67348/c
 ID ADH67348 standard; DNA; 20 BP.
 XX ADH67348;
 XX 25-MAR-2004 (first entry)
 XX Human glucocorticoid receptor-specific antisense oligonucleotide #4182.
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 XX inflammation; tumour formation; diabetes; obesity;
 XX cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; ss;
 XX phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 OS Homo sapiens.
 XX WO2003099215-A2.
 XX 04-DEC-2003.
 XX 20-MAY-2003; 2003WO-US016084.
 XX 20-MAY-2002; 2002US-0381857P.
 XX (PHAA) PHARMACIA CORP.
 XX Crosby SD, Nalseth AE;
 XX WPI; 2004-035034/03.
 XX New antisense compound targeted to a nucleic acid molecule encoding
 XX PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 XX PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 XX PS Claim 4; SEQ ID NO 4182; 985pp; English.
 XX The invention comprises an antisense oligonucleotides that are targeted
 XX CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 XX CC antisense oligonucleotides of the invention are useful for preventing or
 XX CC delaying infection, inflammation or tumour formation. The antisense

CC oligonucleotides are also useful for treating diabetes, obesity, The
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 1136
ADH67401/C
ID ADH67401 standard; DNA; 20 BP.
XX
AC ADH67401;
XX
XX 25-MAR-2004 (first entry)
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4235.
XX
XX antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
XX WO2003099215-A2.
PN
XX
XX 04-DEC-2003.
XX
XX 20-MAY-2003; 2003WO-US016084.
XX
XX 20-MAY-2002; 2002US-0381857P.
PR
XX (PHAA) PHARMACIA CORP.
PA
XX Crosby SD, Nalseth AE;
PI
XX WPI; 2004-035034/03.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 4235; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 20 AAAAAAAAAAAAAAAAAA 3

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 1137
ADK74688/C
ID ADK74688 standard; DNA; 20 BP.
XX
AC ADK74688;
XX
XX 20-MAY-2004 (first entry)
DT Chimeric phosphorothioate oligonucleotide to target Navi.3 #2022.
DE
XX
XX Navi.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA) PHARMACIA CORP.
PA
XX Roberts SL;
PI
XX WPI; 2004-203785/19.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi.3, useful for treating a disease or condition associated
PT with Navi.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2022; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi.3 RNA.

SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1138
ADK74367/C
ID ADK74367 standard; DNA; 20 BP.
XX
AC ADK74367;
XX
XX 20-MAY-2004 (first entry)
DT
XX

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1701.
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX Synthetic.
 OS
 PN WO2004016754-A2.
 XX
 PD 26-FEB-2004.
 XX
 PF 14-AUG-2003; 2003WO-US025465.
 XX
 PR 14-AUG-2002; 2002US-0403416P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Robertd SL;
 XX
 XX WPI; 2004-203785/19.
 DR
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 XX Claim 4; SEQ ID NO 1701; 417pp; English.
 PS
 XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 DE
 XX Query Match 0.7%; Score 18; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 3
 RESULT 1139
 AED13298
 ID AED13298 standard; DNA; 20 BP.
 XX
 AC AED13298;
 XX
 XX 01-DEC-2005 (first entry)
 DT
 XX Oligonucleotide ODN6 used to illustrate nucleic acid labeling method.
 DE
 XX DNA detection; RNA detection; SNP detection; ss.
 KW
 XX Synthetic.
 OS
 XX JP2005265617-A.
 PN
 XX 29-SEP-2005.
 PD
 XX

PF 18-MAR-2004; 2004JP-00078900.
 XX
 PR 18-MAR-2004; 2004JP-00078900.
 XX
 PA (TAKE/) TAKENAKA S.
 XX
 PI Takenaka S, Nojima T, Mukumoto K, Tabata E;
 XX
 DR WPI; 2005-685344/71.
 XX
 XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
 PT derivative for labeling thymine, uracil and guanine, which exists in
 PT mismatch region of nucleic acid or unstable region of hydrogen bond of
 PT nucleic acid.
 XX
 XX Example 1; Page 24; 40pp; Japanese.
 PS
 XX The present invention relates to a method (M1) for labeling double
 CC stranded nucleic acid for efficient detection of DNA or RNA. The method
 CC comprises using a carbodiimide derivative for labeling one or more of
 CC thymine, uracil and guanine, which exists in the mismatch region of the
 CC double stranded nucleic acid or its vicinity, or unstable region of the
 CC hydrogen bond of the double stranded nucleic acid. (M1) is useful for
 CC labeling double stranded or single stranded nucleic acid or detecting
 CC single nucleotide polymorphisms. The present sequence was used to
 CC illustrate the method of the invention.
 XX
 SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 DE
 XX Query Match 0.7%; Score 18; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 DB 3 TAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 1140
 AAQ75702/c
 ID AAQ75702 standard; DNA; 21 BP.
 XX
 AC AAQ75702;
 XX
 XX 04-AUG-1995 (first entry)
 DT
 XX Reverse transcription primer used in cDNA analysis technique.
 DE
 XX Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 XX Synthetic.
 OS
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 7; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1141
AAQ75724/c
ID AAQ75724 standard; DNA; 21 BP.
XX
AC AAQ75724;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 4 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1142
AAQ75671/c
ID AAQ75671 standard; DNA; 21 BP.
XX

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AC AAQ75671;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1143
AAQ75733/c
ID AAQ75733 standard; DNA; 21 BP.
XX
AC AAQ75733;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX

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PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1147
AAQ75725/c
ID AAQ75725 standard; DNA; 21 BP.
XX
AC AAQ75725;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
PN JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1147
AAQ75725/c
ID AAQ75725 standard; DNA; 21 BP.
XX
AC AAQ75725;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
PN JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1148
AAQ75732/c
ID AAQ75732 standard; DNA; 21 BP.
XX
AC AAQ75732;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
PN JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1149
AAQ75684/c
ID AAQ75684 standard; DNA; 21 BP.
XX
AC AAQ75684;

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XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN
XX PD
XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1150
AAQ75690/c
ID AAQ75690 standard; DNA; 21 BP.
XX
XX AC AAQ75690;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN
XX PD
XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1150
AAQ75690/c
ID AAQ75690 standard; DNA; 21 BP.
XX
XX AC AAQ75690;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN
XX PD
XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1151
AAQ75688/c
ID AAQ75688 standard; DNA; 21 BP.
XX
XX AC AAQ75688;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN
XX PD
XX 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1152
AAQ75694/c
ID AAQ75694 standard; DNA; 21 BP.
XX AC AAQ75694;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 7; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1154
AAQ75686/c
ID AAQ75686 standard; DNA; 21 BP.
XX AC AAQ75686;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 7; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAA 1

RESULT 1153
AAQ75700/c
ID AAQ75700 standard; DNA; 21 BP.
XX AC AAQ75700;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.

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CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1155
AAQ75689/c
ID AAQ75689 standard; DNA; 21 BP.
XX
AC AAQ75689;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1156
AAQ75723/c
ID AAQ75723 standard; DNA; 21 BP.
XX
AC AAQ75723;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1157
AAQ75726/c
ID AAQ75726 standard; DNA; 21 BP.
XX
AC AAQ75726;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 8; 1lpp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1158

AAQ75692/c

ID AAQ75692 standard; DNA; 21 BP.

XX AAQ75692;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; Gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 1lpp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1159

AAQ75672/c

ID AAQ75672 standard; DNA; 21 BP.

XX AAQ75672;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; Gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 1lpp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1160

AAQ75685/c

ID AAQ75685 standard; DNA; 21 BP.

XX AAQ75685;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

KW Analysis; Gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

PD 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1161
 AAQ75699/c
 ID AAQ75699 standard; DNA; 21 BP.
 XX
 XX AAQ75699;
 XX AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1162
 AAQ75731/c
 ID AAQ75731 standard; DNA; 21 BP.
 XX
 XX AAQ75731;
 XX AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1163
 AAQ75673/c
 ID AAQ75673 standard; DNA; 21 BP.
 XX
 XX AAQ75673;
 XX AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1162
 AAQ75731/c
 ID AAQ75731 standard; DNA; 21 BP.
 XX
 XX AAQ75731;
 XX AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1163
 AAQ75673/c
 ID AAQ75673 standard; DNA; 21 BP.
 XX
 XX AAQ75673;
 XX AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.

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XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||
XX DB 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1164
XX AAQ75691/c
XX ID AAQ75691 standard; DNA; 21 BP.
XX
XX AC AAQ75691;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||
XX DB 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1164
XX AAQ75691/c
XX ID AAQ75691 standard; DNA; 21 BP.
XX
XX AC AAQ75691;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||
XX DB 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1165
XX AAQ75734/c
XX ID AAQ75734 standard; DNA; 21 BP.
XX
XX AC AAQ75734;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||

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PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||
XX DB 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1165
XX AAQ75734/c
XX ID AAQ75734 standard; DNA; 21 BP.
XX
XX AC AAQ75734;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX |||||||

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Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1166
AAQ75683/c
ID      AAQ75683 standard; DNA; 21 BP.
XX
XX      AC      AAQ75683;
XX
XX      DT      04-AUG-1995 (first entry)
XX
XX      DE      Reverse transcription primer used in cDNA analysis technique.
XX
XX      KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      OS      Synthetic.
XX
XX      PN      JP06303997-A.
XX
XX      PD      01-NOV-1994.
XX
XX      PF      16-APR-1993; 93JP-00112515.
XX
XX      PR      16-APR-1993; 93JP-00112515.
XX
XX      PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX      DR      WPI; 1995-018287/03.
XX
XX      PT      Analysis of cDNA and gene expression - by amplification of mRNA followed
XX      by digestion with restriction enzymes.
XX
XX      PS      Disclosure; Page 7; 11pp; Japanese.
XX
XX      CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      SQ      Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 18; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1167
AAQ75701/c
ID      AAQ75701 standard; DNA; 21 BP.
XX
XX      AC      AAQ75701;
XX
XX      DT      04-AUG-1995 (first entry)
XX
XX      DE      Reverse transcription primer used in cDNA analysis technique.
XX
XX      KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      OS      Synthetic.
XX
XX      PN      JP06303997-A.
XX
XX      PD      01-NOV-1994.

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XX      16-APR-1993; 93JP-00112515.
XX
XX      16-APR-1993; 93JP-00112515.
XX
XX      PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX      DR      WPI; 1995-018287/03.
XX
XX      PT      Analysis of cDNA and gene expression - by amplification of mRNA followed
XX      by digestion with restriction enzymes.
XX
XX      PS      Disclosure; Page 7; 11pp; Japanese.
XX
XX      CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      SQ      Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 18; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1168
ADK01323/c
ID      ADK01323 standard; DNA; 21 BP.
XX
XX      AC      ADK01323;
XX
XX      DT      06-MAY-2004 (first entry)
XX
XX      DE      Rat DNA microarray capture oligonucleotide #43.
XX
XX      KW      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX      blood; nerve; germ cell; food additive; food supplement.
XX
XX      OS      Rattus sp.
XX
XX      PN      DE10208794-A1.
XX
XX      PD      04-SEP-2003.
XX
XX      PF      28-FEB-2002; 2002DE-01008794.
XX
XX      PR      28-FEB-2002; 2002DE-01008794.
XX
XX      PA      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX      PI      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX
XX      PT      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX
XX      PS      Example; Page 5; 8pp; German.
XX
XX      CC      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)

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comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1169
ADK01307/C
ID ADK01307 standard; DNA; 21 BP.
AC ADK01307;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #27.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.

This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1170
ADK01306/C
ID ADK01306 standard; DNA; 21 BP.
XX
XX ADK01306;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #26.
DE
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT

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PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1171
ADK01305/c
ID ADK01305 standard; DNA; 21 BP.
XX
AC ADK01305;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #25.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX

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DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1172
ADK01308/c
ID ADK01308 standard; DNA; 21 BP.
XX
AC ADK01308;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #28.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX

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PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1173
ADK01321/c
ID ADK01321 standard; DNA; 21 BP.
XX
XX ADK01321;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #41.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX

PF 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1174
ADK01322/c
ID ADK01322 standard; DNA; 21 BP.
XX
XX ADK01322;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #42.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX

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XX AA505075-derived oligonucleotide SEQ ID 4945.
DE Human, antiseize; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPITG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antiseize
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4945; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it .
XX
XX Sequence 21 BP; 17 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
DB ||||||||||||||||
4 TAAAAAAAAAAAAAAAAA 21
RESULT 1177
ADP86142/c
ID ADP86142 standard; DNA; 21 BP.
XX
AC ADP86142;
XX
DT 09-SEP-2004 (first entry)
XX
XX CpG immunostimulatory oligonucleotide #13.
XX
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma;
KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
PN WO2004053104-A2.
XX
XX 24-JUN-2004.
XX
XX 11-DEC-2003; 2003WO-US039775.
XX
XX 11-DEC-2002; 2002US-0432409P.
XX 25-SEP-2003; 2003US-0506108P.
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX WPI; 2004-487902/46.
XX
XX New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
XX Example; SEQ ID NO 13; 104pp; English.
XX
XX The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide.
XX
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

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Db      21  AAAAAAAAAAAAAAAAAAAAA 4
RESULT 1178
ADX69527/c
ID ADX69527 standard; DNA; 21 BP.
XX
AC ADX69527;
XX
DT 21-APR-2005 (first entry)
XX
DE Mouse ICAM-1 binding protein associated PCR primer SEQ ID NO 10.
XX
KW ICAM-1 binding protein; ICAM-1; inflammation; ss; PCR; primer.
XX
OS Synthetic.
XX
PN KR2004078763-A.
XX
PD 13-SEP-2004.
XX
PF 05-MAR-2003; 2003KR-00013610.
XX
PR 05-MAR-2003; 2003KR-00013610.
XX
PA (HAHN/) HAHN J H.
XX
PA (LEEW/) LEE W J.
XX
PI Hahn JH, Lee WJ;
XX
XX WPI; 2005-077558/09.
XX
PT ICAM-1 binding protein, and polynucleotide encoding the same, vector and
PT host cell containing the same polynucleotide, and composition comprising
PT the same protein.
XX
PS Example 2; SEQ ID NO 10; 16pp; Korean.
XX
CC The invention relates to an ICAM-1 binding protein, and a polynucleotide
CC encoding the same, a vector and a host cell containing the same
CC polynucleotide, and a composition comprising the same protein are
CC provided. The ICAM-1 binding protein has high specificity to ICAM-1 and
CC small molecular size, so that it can be effectively expressed in
CC Escherichia coli. and the composition containing the ICAM-1 binding
CC protein has improved stability and excellent tissue penetration, so that
CC it can be useful for the treatment of inflammation. The present sequence
CC represents a mouse ICAM-1 binding protein associated PCR primer.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAA 2726
Db      21  AAAAAAAAAAAAAAAAAAAAA 4
RESULT 1179
AAQ64706/c
ID AAQ64706 standard; cDNA to mRNA; 22 BP.
XX
AC AAQ64706;
XX
XX
DT 25-MAR-2003 (revised)
DT 04-JAN-1995 (first entry)
XX
DE 2',5'-linked tetraadenylate-antisense oligonucleotide chimeric mol.
XX
XX antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
KW RNA cleavage; antiviral therapy; chimeric molecule; ss.

```

```

XX Synthetic.
XX Key Location/Qualifiers
XX misc_feature 1..4
XX /tag= a
XX /label= 2',5'-linked tetraadenylate
XX /note= "nucleotides linked through phosphodiester bonds
XX at hydroxyl groups of 2' and 5' carbons"
XX misc_feature 5..22
XX /tag= b
XX /note= "antisense region"
XX
PN WO9409129-A2.
XX
XX 28-APR-1994.
XX
XX 20-OCT-1993; 93WO-US010103.
XX
XX 21-OCT-1992; 92US-00965666.
XX 17-SEP-1993; 93US-00123449.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX (CLEV-) CLEVELAND CLINIC RES INST.
XX
XX Torrence P, Silverman R, Maitra R, Lesiak K;
XX WPI; 1994-151315/18.
XX
XX Specific cleavage of RNA, useful partic. for treating viral infection,
XX cancers, etc. - by using anti-sense oligo:nucleotide coupled to activator
XX of 2-5A dependent RNase.
XX
XX Example 1; Page 68; 86pp; English.
XX
XX This sequence is an example of a 2-5A-antisense oligonucleotide chimeric
XX molecule. The antisense region targets the chimeric molecule to a
XX particular region of RNA to be specifically cleaved and the 2',5'-linked
XX tetraadenylate tail activates the 2-5A RNase. Typical applications are
XX treatment of viral infections (esp. for cleavage of an RNA virus genome),
XX cancer; leukaemia, cardiovascular disorders (e.g. restenosis after
XX angioplasty), genetic disorders, osteoarthritis or rheumatoid arthritis.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 4 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAA 2726
Db      22  AAAAAAAAAAAAAAAAAAAAA 5
RESULT 1180
AAQ75611/c
ID AAQ75611 standard; DNA; 21 BP.
XX
XX AAQ75611;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.

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XX PF 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 1lpp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
XX ||| ||||| ||||| ||||| |||||
XX 21 CTCCTAAAAAATAAAAAAAAAAAAAA 1
XX
RESULT 1181
AAQ75630/C
ID AAQ75630 standard; DNA; 21 BP.
XX AC AAQ75630;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 1lpp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily

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CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 2704 GTACTAAAAAATAAAAAAAAAA 2724
XX ||| ||||| ||||| ||||| |||||
XX 21 GTTCAAAAAAATAAAAAAAAAA 1
XX
RESULT 1182
AAQ75633/C
ID AAQ75633 standard; DNA; 21 BP.
XX AC AAQ75633;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 1lpp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 2706 ACTAAAAAATAAAAAAAAAA 2726
XX ||| ||||| ||||| ||||| |||||
XX 21 AATCAAAAAAATAAAAAAAAAA 1
XX
RESULT 1183
AAQ75651/C
ID AAQ75651 standard; DNA; 21 BP.
XX AC AAQ75651;
XX 04-AUG-1995 (first entry)
XX

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DE Reverse transcription primer used in cDNA analysis technique.
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 6; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
 DB 21 CGACAAAAAATAAAAAAAAAAAAAA 1
 XX
 RESULT 1184
 AAQ75748/c
 ID AAQ75748 standard; DNA; 21 BP.
 XX
 AC AAQ75748;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 8; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2705 TACTAAAAAATAAAAAAAAAAAAAA 2725
 DB 21 TGGCAAAAAAATAAAAAAAAAAAAAA 1
 XX
 RESULT 1185
 AAQ75609/c
 ID AAQ75609 standard; DNA; 21 BP.
 XX
 AC AAQ75609;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 3 G; 18 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2706 ACTAAAAAATAAAAAAAAAAAAAA 2726
 DB 21 ACCCAAAAAAATAAAAAAAAAAAAAA 1
 XX

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RESULT 1186
AAQ75620/c
ID AAQ75620 standard; DNA; 21 BP.
XX
XX AC AAQ75620;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
XX | | | | | | | | | | | | | | | | | |
XX Db 21 TCCCAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1187
AAQ75657/c
ID AAQ75657 standard; DNA; 21 BP.
XX
XX AC AAQ75657;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
XX | | | | | | | | | | | | | | | | | |
XX Db 21 TCCCAAAAAAAAAAAAAAAAAAAAA 1
XX

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PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2726
XX | | | | | | | | | | | | | | | | | |
XX Db 21 ACGCAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1188
AAQ75664/c
ID AAQ75664 standard; DNA; 21 BP.
XX
XX AC AAQ75664;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 7; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX

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XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
      Query Match 0.6%; Score 17.8; DB 1; Length 21;
      Best Local Similarity 90.5%; Pred. No. 9.6e+02;
      Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 11 |||||
12 |||||
13 |||||
14 |||||
15 |||||
16 |||||
17 |||||
18 |||||
19 |||||
20 |||||
21 TAGCAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1189
AAQ75736/c
ID AAQ75736 standard; DNA; 21 BP.
XX AC AAQ75736;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX OS
XX PN JP06303997-A.
XX XX
XX FD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR
XX XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
      Query Match 0.6%; Score 17.8; DB 1; Length 21;
      Best Local Similarity 90.5%; Pred. No. 9.6e+02;
      Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 11 |||||
12 |||||
13 |||||
14 |||||
15 |||||
16 |||||
17 |||||
18 |||||
19 |||||
20 |||||
21 TCCGAAAAAAAAAAAAAAAAAAAA 1

RESULT 1190
AAQ75627/c
ID AAQ75627 standard; DNA; 21 BP.
XX AC AAQ75627;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.

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PS Disclosure; Page 8; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
DB 21 CTCGAAAAAATAAAAAAAAAAAAAA 1
RESULT 1192
AAQ75787/c
ID AAQ75787 standard; DNA; 21 BP.
XX
XX AAQ75787;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
OS
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2706 ACTAAAAAATAAAAAAAAAAAAAA 2726
DB 21 ATTCAAAAAATAAAAAAAAAAAAAA 1
RESULT 1194
AAQ75639/c
ID AAQ75639 standard; DNA; 21 BP.
XX
XX AAQ75639;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
OS
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.

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KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
XX ||| ||||| ||||| |||||
XX Db 21 AAGGAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1198
XX AAQ75614/c
XX ID AAQ75614 standard; DNA; 21 BP.
XX
XX AC AAQ75614;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
XX ||| ||||| ||||| |||||
XX Db 21 TCACAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1199
XX AAQ75652/c
XX ID AAQ75652 standard; DNA; 21 BP.
XX
XX AC AAQ75652;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2704 GTACTATAAAAAAAAAAAAAA 2724
XX ||| ||||| ||||| |||||
XX Db 21 GTCCAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1199
XX AAQ75652/c
XX ID AAQ75652 standard; DNA; 21 BP.
XX
XX AC AAQ75652;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
XX ||| ||||| ||||| |||||
XX Db 21 TCACAAAAAAAAAAAAAAAAAAAA 1
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RESULT 1200
AAQ75665/C
ID AAQ75665 standard; DNA; 21 BP.
XX
AC AAQ75665;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 21 AAGCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1201
AAQ7567/C
ID AAQ7567 standard; DNA; 21 BP.
XX
AC AAQ7567;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2727
DB 21 CCAGAAAAAAAAAAAAAAAAAAAA 1

RESULT 1202
AAQ75612/C
ID AAQ75612 standard; DNA; 21 BP.
XX
AC AAQ75612;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

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CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2725
Db 21 TCCCAAAAAA 1

RESULT 1206
AAQ75659/c
ID AAQ75659 standard; DNA; 21 BP.
XX
AC AAQ75659;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAAAA 2727
Db 21 CTGCAAAAAA 1

RESULT 1207
AAQ7569/c
ID AAQ7569 standard; DNA; 21 BP.
XX
AC AAQ7569;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2725
Db 21 TTGCAAAAAA 1

RESULT 1208
AAQ75769/c
ID AAQ75769 standard; DNA; 21 BP.
XX
AC AAQ75769;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.

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AAQ75740/c
ID AAQ75740 standard; DNA; 21 BP.
XX
AC AAQ75740;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2725
Db 21 TTGCAAAAAA 1

RESULT 1208
AAQ75769/c
ID AAQ75769 standard; DNA; 21 BP.
XX
AC AAQ75769;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.

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XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
Db 21 ACAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1209
AAQ75779/c
ID AAQ75779 standard; DNA; 21 BP.
XX
XX AAQ75779;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
Db 21 ACAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1209
AAQ75779/c
ID AAQ75779 standard; DNA; 21 BP.
XX
XX AAQ75779;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
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Query Match          0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAAAAAAAAAAAAAAAAAAAA 2727
Db 21 CGAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1210
AAQ75760/c
ID AAQ75760 standard; DNA; 21 BP.
XX
XX AAQ75760;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TATGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1211
AAQ75632/c
ID AAQ75632 standard; DNA; 21 BP.
XX
XX AAQ75632;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
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XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAA 2725
DB 21 TATCAAAAAA 1
XX
RESULT 1212
AAQ75737/c
XX AAQ75737 standard; DNA; 21 BP.
XX AC AAQ75737;
XX 04-AUG-1995' (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 8; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAA 2725
DB 21 TATCAAAAAA 1
XX
RESULT 1212
AAQ75737/c
XX AAQ75737 standard; DNA; 21 BP.
XX AC AAQ75737;
XX 04-AUG-1995' (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 8; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of

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CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAA 2726
DB 21 ACCGAAAAA 1
XX
RESULT 1213
AAQ75757/c
XX AAQ75757 standard; DNA; 21 BP.
XX AC AAQ75757;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 8; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAA 2726
DB 21 ATTGAAAAA 1
XX
RESULT 1214
AAQ75785/c

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Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 TCACAAAAAAAAAAAAAAAAAAAA 1

RESULT 1217
AAQ75640/c
ID AAQ75640 standard; DNA; 21 BP.
XX
AC AAQ75640;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2704 GTACTAAAAAAAAAAAAAAAAA 2724
Db 21 GTGCAAAAAAAAAAAAAAAAAA 1

RESULT 1219
AAQ75755/c
ID AAQ75755 standard; DNA; 21 BP.
XX
AC AAQ75755;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 TCACAAAAAAAAAAAAAAAAAAAA 1

RESULT 1218
AAQ75662/c
ID AAQ75662 standard; DNA; 21 BP.
XX
AC AAQ75662;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX

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OS Synthetic.
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2704 GTACTAAAAAAAAAAAAAAAAA 2724
Db 21 GTGCAAAAAAAAAAAAAAAAAA 1

RESULT 1219
AAQ75755/c
ID AAQ75755 standard; DNA; 21 BP.
XX
AC AAQ75755;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX FT
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2706 ACTAATAAAAAAAAAAAAAAAAAA 2726
XX DB 21 AGTGAATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1223
XX AAQ75654/c
XX ID AAQ75654 standard; DNA; 21 BP.
XX AC AAQ75654;
XX
XX 04-AUG-1995 (first entry)
XX DT
XX Reverse transcription primer used in cDNA analysis technique.
XX DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX KW
XX OS Synthetic.
XX OS
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PT
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2705 TACTAATAAAAAAAAAAAAAAAAAA 2725
XX DB 21 TAGGATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1225
XX AAQ75792/c
XX ID AAQ75792 standard; DNA; 21 BP.
XX AC AAQ75792;
XX
XX 04-AUG-1995 (first entry)
XX DT
XX Reverse transcription primer used in cDNA analysis technique.
XX DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX KW
XX OS Synthetic.
XX OS
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PT
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2704 GTACTAATAAAAAAAAAAAAAAAAAA 2724
XX DB 21 GGACATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1224
XX AAQ75792/c
XX ID AAQ75792 standard; DNA; 21 BP.
XX AC AAQ75792;
XX
XX 04-AUG-1995 (first entry)
XX DT
XX Reverse transcription primer used in cDNA analysis technique.
XX DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX KW
XX OS Synthetic.
XX OS
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PT
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2705 TACTAATAAAAAAAAAAAAAAAAAA 2725
XX DB 21 TAGGATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1225
XX AAQ75663
XX ID AAQ75663 standard; DNA; 21 BP.
XX AC AAQ75663;
XX
XX 30-NOV-1999 (first entry)
XX DT
XX Human polymorphic region 752.
XX DE
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
XX KW cell viability; loss of heterozygosity; precancerous condition; ASI;
XX KW allele specific inhibitor; somatic cell; diagnosis; prevention;
XX KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;

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KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9841648-A2.
 XX
 XX 24-SEP-1998.
 PD
 XX 19-MAR-1998; 98WO-US005419.
 PF
 XX 20-MAR-1997; 97US-0041057P.
 PR
 XX (VARI-) VARIAGENTS INC.
 PA
 PI Housman D, Ledley FD, Stanton VP;
 XX
 DR WPI; 1998-521232/44.
 XX
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 PS Disclosure; Fig 7; 605pp; English.
 XX
 CC This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 19 A; 1 C; 1 G; 0 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 Db 1 AACAAAGAAAAAAAAAAAAAAAAA 21
 RESULT 1226
 ACL53469/c
 ID ACL53469 standard; RNA; 21 BP.
 XX
 XX ACL53469;
 AC
 XX 24-MAR-2005 (first entry)
 DT
 XX
 DE TRPM4 siRNA antisense sequence, SEQ ID 14541.
 XX
 XX Cytostatic; Gene therapy; Vaccine; RNA Interference; cancer; ss;
 KW short interfering RNA; Gene silencing.
 XX
 OS Synthetic.
 XX
 XX WO2005001092-A2.
 PN
 XX 06-JAN-2005.
 PD

XX 19-MAY-2004; 2004WO-US015645.
 PF
 XX 20-MAY-2003; 2003US-0471729P.
 PR
 XX (AMHP) WYETH.
 PA
 XX Be X, Wei L, Slonim DK, Howes SH;
 PI
 XX WPI; 2005-075568/08.
 DR
 XX Pharmaceutical composition comprising an agent capable of modulating an
 PT expression level or protein activity of a gene, e.g. ABCc4, or a T cell
 PT activated by the polypeptide or antibody, and a carrier, useful for
 PT treating cancer.
 XX
 XX Claim 3; SEQ ID NO 14541; 113pp; English.
 PS
 CC The present invention relates to a novel pharmaceutical composition
 CC comprising: (a) an agent capable of modulating an expression level or
 CC protein activity of a cancer-related transmembrane protein (CRTP) or gene
 CC ; an antibody specific for a CRTP, or a T cell activated by a CRTP; and
 CC (b) a carrier. The pharmaceutical composition may also comprise a
 CC polynucleotide capable of inhibiting or decreasing the expression of the
 CC CRTP by RNA interference or an antisense mechanism. The CRTPs of the
 CC invention are selected from ABCc4, C20orf103, CACNA1D, CDH6, CST, ENPP3,
 CC FLJ11856, GPR54, HAVCR1, SLC6A3, SLC30A4, TRG, and TRPM4. The
 CC pharmaceutical composition is useful for treating cancer, e.g. colon
 CC cancer, lung cancer, breast cancer, prostate cancer, liver cancer, kidney
 CC cancer, stomach cancer, and esophageal cancer. The present sequence is a
 CC CRTP short interfering RNAs (siRNA) oligonucleotide. Note: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 21 BP; 7 A; 6 C; 6 G; 0 T; 2 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2120 AACCTGGAGGCCTTGGCCTTG 2140
 Db 21 AACCTGGTGGCCTTGTCTTG 1
 RESULT 1227
 AAT69640/c
 ID AAT69640 standard; DNA; 19 BP.
 XX
 AC AAT69640;
 XX
 XX 20-FEB-1998 (first entry)
 DT
 XX
 DE Telomerase Oligo-dT-Primer P3.
 XX
 XX Telomerase; substrate; primer; detection; 5'-region; retrovirus;
 KW long terminal repeat 2; LTR-2; diagnosis; tumour; screening;
 KW effector compound; PCR; amplification; Oligo-dT-Primer; ss.
 XX
 OS Synthetic.
 XX
 XX DE19644302-A1.
 PN
 XX 05-JUN-1997.
 PD
 XX 24-OCT-1996; 96DE-01044302.
 PF
 XX 28-NOV-1995; 95DE-01044317.
 PR
 XX (BOEF) BOEHRINGER MANNHEIM GMBH.
 PA
 XX Emrich T, Leying H, Hinzpeter M, Karl G;
 PI


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AC AAQ75556;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAA 2726
DB 19 TGA.....AAAAA 1

RESULT 1231
AAQ75547/c
ID AAQ75547 standard; DNA; 19 BP.
XX
XX AAQ75547;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTA.....AAAAA 2725
DB 19 CCA.....AAAAA 1

RESULT 1232
AAQ75555/c
ID AAQ75555 standard; DNA; 19 BP.
XX
XX AAQ75555;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTA.....AAAAA 2725
DB 19 CCA.....AAAAA 1

RESULT 1232
AAQ75555/c
ID AAQ75555 standard; DNA; 19 BP.
XX
XX AAQ75555;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 2707 CTAAAAAAGAAAAA 2725
Db 19 CGAAAAAAGAAAAA 1

RESULT 1233
AAQ75557/C
ID AAQ75557 standard; DNA; 19 BP.
XX
XX AAQ75557;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAGAAAAA 2727
Db 19 AGAAAAAAGAAAAA 1

RESULT 1234
ABK94423/C
ID ABK94423 standard; DNA; 19 BP.
XX
XX ABK94423;
XX
XX 27-AUG-2002 (first entry)
XX
XX Human MLH1 DNA mismatch repair gene, exon 12, PCR primer 12.1F.
XX
XX hMLH1; DNA mismatch repair; BRCA1; ss; PCR; primer; BRCA1;
XX breast and ovarian cancer susceptibility gene; TGDS; human;
XX two-dimensional DNA electrophoresis; tumour suppressor gene;
XX breast cancer; ovarian cancer; tumour.
XX

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OS Homo sapiens.
XX
XX WO200236819-A1.
XX
XX 10-MAY-2002.
XX
XX 06-NOV-2000; 2000WO-IB001607.
XX
XX 06-NOV-2000; 2000WO-IB001607.
XX
XX (SCSC-) ACAD APPLIED SCI.
XX
XX Vijg J;
XX
XX WPI; 2002-471507/50.
XX
XX Detecting mutations in the BRCA1 and hMLH1 gene comprises subjecting
XX amplification products to 2-dimensional gel electrophoresis to produce a
XX characteristic spot pattern for a specific mutation in either the BRCA1
XX or the hMLH1 gene.
XX
XX Claim 6; Page 21; 57pp; English.
XX
XX The invention relates to detecting mutations in the BRCA1 and hMLH1 gene
XX comprising subjecting a set of amplification products to two-dimensional
XX DNA electrophoresis (TGDS) to produce a characteristic spot pattern for a
XX specific mutation in either the BRCA1 or the hMLH1 gene. Also included
XX are test kits for enabling BRCA1 or hMLH1 gene testing comprising short
XX PCR primers given in the specification, mixed in 20 mM of Tris-HCl, 50 mM
XX KCl, 25 micro M of dNTP, and 5 % formamide. The method is useful for
XX detecting mutations in the BRCA1 (breast and ovarian cancer
XX susceptibility gene, a tumour suppressor gene) and hMLH1 gene (a DNA
XX mismatch repair gene). The present sequence is a PCR primer specific to
XX hMLH1 used in the method of the invention
XX
XX Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2703 TGTACTAAAAAAGAAAAA 2721
Db 19 TGTATTAAAAAAGAAAAA 1

RESULT 1235
AAQ75566/C
ID AAQ75566 standard; DNA; 20 BP.
XX
XX AAQ75566;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX

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PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
DB 19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1236
AAQ75591/c
ID AAQ75591 standard; DNA; 20 BP.

XX AAQ75591;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725

DB 19 CGAAAAAATAAAAAAAAAA 1

RESULT 1237

AAQ75598/c

ID AAQ75598 standard; DNA; 20 BP.

XX AAQ75598;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
DB 19 TCAAAAAAATAAAAAAAAAA 1

RESULT 1238

AAQ75559/c

ID AAQ75559 standard; DNA; 20 BP.

XX AAQ75559;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.


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XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XW WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
DB 19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1242
AAQ75597/c
ID AAQ75597 standard; DNA; 20 BP.
AC AAQ75597;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XW JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XW WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
DB 19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1242
AAQ75597/c
ID AAQ75597 standard; DNA; 20 BP.
AC AAQ75597;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XW JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XW WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
DB 19 TGAATAAAAAAAAAAAAAAAAA 1

RESULT 1243
AAQ75594/c
ID AAQ75594 standard; DNA; 20 BP.
XX AAQ75594;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XW JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XW WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
DB 19 TGAATAAAAAAAAAAAAAAAAA 1

RESULT 1244
AAQ75594/c
ID AAQ75594 standard; DNA; 20 BP.
XX AAQ75594;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XW JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XW WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 11pp; Japanese.
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XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
DB 19 TGAATAAAAAAAAAAAAAAAAA 1

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CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

  Query Match      0.6%; Score 17.4; DB 1; Length 20;
  Best Local Similarity 94.7%; Pred. No. 9.9e+02;
  Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
Db 19 CCAAAAAAAGAAAAA 1

RESULT 1247
AAQ75602/c
ID AAQ75602 standard; DNA; 20 BP.
XX
AC AAQ75602;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

  Query Match      0.6%; Score 17.4; DB 1; Length 20;
  Best Local Similarity 94.7%; Pred. No. 9.9e+02;
  Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAA 2727
Db 19 AGAAAAAAGAAAAA 1

RESULT 1248
AAQ75567/c
ID AAQ75567 standard; DNA; 20 BP.
XX
AC AAQ75567;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

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DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

  Query Match      0.6%; Score 17.4; DB 1; Length 20;
  Best Local Similarity 94.7%; Pred. No. 9.9e+02;
  Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAGAAAAA 2724
Db 19 ACAAAAAAAGAAAAA 1

RESULT 1249
AAQ75592/c
ID AAQ75592 standard; DNA; 20 BP.
XX
AC AAQ75592;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

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XX PS Disclosure; Page 5; 1lpp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
DB 19 CGAAAAAAGAAAAA 1

RESULT 1250
AAQ75599/c
ID AAQ75599 standard; DNA; 20 BP.
XX AC AAQ75599;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 1lpp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAA 2727
DB 19 AGAAAAAAGAAAAA 1

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RESULT 1251
AAF99943
ID AAF99943 standard; DNA; 20 BP.
XX AC AAF99943;
XX DT 12-JUL-2001 (first entry)
XX DE Synthetic oligonucleotide #9.
XX KW Oligonucleotide purification; liquid chromatography;
XX KW hydrophobic protective group; deprotection; ds.
XX OS Synthetic.
XX PN JP2000342265-A.
XX PD 12-DEC-2000.
XX PF 02-JUN-1999; 99JP-00154974.
XX PR 02-JUN-1999; 99JP-00154974.
XX PA (TOAG ) TOA GOSHI CHEM IND LTD.
XX DR WPI; 2001-268251/28.
XX PT A process for purification of oligonucleotides using liquid
XX PT chromatography.
XX PS Example 1; Page 4; 13pp; Japanese.
XX CC The present sequence is an oligonucleotide provided in a specification
XX CC relating to the simplified purification of oligonucleotides by liquid
XX CC chromatography. The process comprises: (a) pouring oligonucleotides
XX CC protected with a hydrophobic group and oligonucleotide with no protective
XX CC group into a liquid chromatography column packed with an acid and alkali
XX CC resistant packing agent, such as polystyrene resin; (b) pouring a mixed
XX CC developing solvent composed of a buffer made from a volatile salt and a
XX CC water soluble organic solvent at a suitable concentration gradient into
XX CC the column; (c) pouring an acid, particularly 6-16 v/v% acetic acid, into
XX CC the column to deprotect the oligonucleotides protected with the
XX CC hydrophobic group; (d) pouring a mixed developing solvent composed of a
XX CC buffer made from a volatile salt, particularly 0.05-0.5 N aqueous
XX CC ammonium hydrogencarbonate solution adjusted at pH 8-10, and a water
XX CC soluble organic solvent at a suitable concentration gradient to elute the
XX CC deprotected oligonucleotides; and (e) removal of the solvent and the salt
XX CC from the eluted oligonucleotides
XX SQ Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAGAAAAA 2726
DB 1 TAAAAAAGAAAAA 19

RESULT 1252
ABK48094/c
ID ABK48094 standard; DNA; 20 BP.
XX AC ABK48094;
XX DT 15-JUL-2002 (first entry)
XX DE Human dendritic cell wall membrane molecule-associated primer #2.
XX KW Human; cancer; autoimmune disease; organ transplantation; infection;

```

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KW allergy; vaccine; dendritic cell therapy; immune response; primer; ss;
KW dendritic cell wall membrane molecule; immunogenic.
XX
XX
OS Homo sapiens.
XX
PN WO200222683-A1.
XX
XX 21-MAR-2002.
XX
XX 12-SEP-2001; 2001WO-JF007919.
XX
XX 12-SEP-2000; 2000JP-00277352.
XX
XX (KIRI ) KIRIN BEER KK.
XX
XX Watarai H, Yamaguchi Y, Hinohara A, Nakagawa R, Ehara H, Imai N;
XX WPI; 2002-362337/39.
XX
XX Isolated dendritic cell wall membrane, variants and their encoded DNAs,
XX useful in producing antibodies and soluble molecules to separate or
XX detect dendritic cells, and for treatment of cancer, autoimmune diseases
XX and infection.
XX
XX Example 6; Page 20; 68pp; Japanese.
XX
XX The invention relates to an isolated human dendritic cell wall membrane
XX molecule comprising a defined amino acid sequence given in the
XX specification, or its variant based on the amino acid sequence but with
XX some amino acids deleted, substituted, inserted and/or added and capable
XX of controlling immune response. The protein, variants and encoded DNAs
XX are useful in producing antibodies and soluble molecules to separate or
XX detect dendritic cells, and for treatment of cancer, autoimmune diseases,
XX organ transplantation, infection and allergy, e.g. by cancer vaccines and
XX dendritic cell therapy to control immune response through promotion or
XX suppression of the interaction between dendritic cells and T cells. The
XX human dendritic cell wall membrane increases expression with maturation
XX of human dendritic cells. The present sequence represents a human
XX dendritic cell wall membrane molecule-associated primer
XX
XX Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 9.9e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2094 ACCCGTGTGTCGACGAGCA 2112
DB 20 ACCCGTGTGTCGACGAGCA 2
XX
RESULT 1253
ABK48093
ID ABK48093 standard; DNA; 20 BP.
XX
XX ABK48093;
AC
XX
XX 15-JUL-2002 (first entry)
XX
XX Human dendritic cell wall membrane molecule-associated primer #1.
XX
XX Human; cancer; autoimmune disease; organ transplantation; infection;
XX allergy; vaccine; dendritic cell therapy; immune response; primer; ss;
XX dendritic cell wall membrane molecule; immunogenic.
XX
XX Homo sapiens.
XX
XX WO200222683-A1.
XX
XX 21-MAR-2002.
XX
XX 12-SEP-2001; 2001WO-JF007919.
XX
XX
XX

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PR 12-SEP-2000; 2000JP-00277352.
XX
XX (KIRI ) KIRIN BEER KK.
XX
XX Watarai H, Yamaguchi Y, Hinohara A, Nakagawa R, Ehara H, Imai N;
XX WPI; 2002-362337/39.
XX
XX Isolated dendritic cell wall membrane, variants and their encoded DNAs,
XX useful in producing antibodies and soluble molecules to separate or
XX detect dendritic cells, and for treatment of cancer, autoimmune diseases
XX and infection.
XX
XX Example 6; Page 20; 68pp; Japanese.
XX
XX The invention relates to an isolated human dendritic cell wall membrane
XX molecule comprising a defined amino acid sequence given in the
XX specification, or its variant based on the amino acid sequence but with
XX some amino acids deleted, substituted, inserted and/or added and capable
XX of controlling immune response. The protein, variants and encoded DNAs
XX are useful in producing antibodies and soluble molecules to separate or
XX detect dendritic cells, and for treatment of cancer, autoimmune diseases,
XX organ transplantation, infection and allergy, e.g. by cancer vaccines and
XX dendritic cell therapy to control immune response through promotion or
XX suppression of the interaction between dendritic cells and T cells. The
XX human dendritic cell wall membrane increases expression with maturation
XX of human dendritic cells. The present sequence represents a human
XX dendritic cell wall membrane molecule-associated primer
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 9.9e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2094 ACCCGTGTGTCGACGAGCA 2112
DB 1 ACCCGTGTGTCGACGAGCA 19
XX
RESULT 1254
ABZ85534
ID ABZ85534 standard; DNA; 20 BP.
XX
XX AC ABZ85534;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX

```

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 776; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. NO. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 1 AAAAAAAAAAAAAAAAAAAAAA 19

RESULT 1255
ABZ89487
ID ABZ89487 standard; DNA; 20 BP.
XX
AC ABZ89487;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4729; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. NO. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAAAAAAAAAAAAAAAAA 2724
Db 2 ACCAAAAAAAAAAAAAAAAAAAAA 20

RESULT 1256
ABZ92865
ID ABZ92865 standard; DNA; 20 BP.
XX
AC ABZ92865;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (SPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 8107; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition.

Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX
PS Disclosure; SEQ ID NO 4180; 872pp; English.

XX
CC The invention relates to a novel pharmacological composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiasthmatic, antiallergic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX
SQ Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 5114; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAA AAAAAAAAAA 2725
Db 1 CTCAAAAA AAAAAAAAAA 19

RESULT 1259
ABD26102
ID ABD26102 standard; DNA; 20 BP.
AC ABD26102; ;
XX
XX 29-JUL-2004 (first entry)
XX
XX AA463249-derived oligonucleotide SEQ ID 5114.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 5114; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAA AAAAAAAAAA 2725
Db 1 CTCAAAAA AAAAAAAAAA 19

RESULT 1260
ABD21764
ID ABD21764 standard; DNA; 20 BP.
XX
XX ABD21764;
XX
XX 29-JUL-2004 (first entry)
XX
XX Human stanniocalcin-derived oligo SEQ ID 776.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX

PN WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPITG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 776; 763pp; English.
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
 CC inflammation, allergies and/or bronchoconstriction and/or lung
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 9.9e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 1 AAAAAAAAAAAAAAAAAA 19
 RESULT 1261
 ID ABD25717 standard; DNA; 20 BP.
 XX
 AC ABD25717;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1034360-derived oligonucleotide SEQ ID 4729.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPITG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 4729; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
 CC inflammation, allergies and/or bronchoconstriction and/or lung
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 18 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 9.9e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2706 ACTAAAAAAAAAAAAAAAAA 2724
 || |||||

Db 2 ACCAAAAAAAAAAAAAAAAA 20

RESULT 1262

ABD25168

ID ABD25168 standard; DNA; 20 BP.

XX

AC ABD25168;

XX

DT 29-JUL-2004 (first entry)

XX

XX AI041482-derived oligonucleotide SEQ ID 4180.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KW pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

PN WO200285309-A2.

XX

XX 31-OCT-2002.

XX

XX 23-APR-2002; 2002WO-US013143.

PF

XX 24-APR-2001; 2001US-0286036P.

PR

XX (EPIG-) EPIGENESIS PHARM INC.

PA

XX

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI

XX WPI; 2003-093058/08.

DR

XX

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX

XX Claim 15; SEQ ID NO 4180; 763pp; English.

XX

XX This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 9.9e+02;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2726

Db 2 TCAAAAAAAAAAAAAAAAAA 20

RESULT 1263

ABD29095

ID ABD29095 standard; DNA; 20 BP.

XX

AC ABD29095;

XX

DT 29-JUL-2004 (first entry)

XX

XX AA679352-derived oligonucleotide SEQ ID 8107.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KW pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

PN WO200285309-A2.

XX

XX 31-OCT-2002.

XX

XX 23-APR-2002; 2002WO-US013143..

PF

XX 24-APR-2001; 2001US-0286036P.

PR

XX (EPIG-) EPIGENESIS PHARM INC.

PA

XX

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI

XX WPI; 2003-093058/08.

DR

XX

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX

XX Claim 15; SEQ ID NO 8107; 763pp; English.

XX

XX This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2706 ACTAAAAA 2724
Db 2 AGTAAAAA 20
RESULT 1264
ADH66659/c
ID ADH66659 standard; DNA; 20 BP.
XX
AC ADH66659;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3493.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO200309215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AS;
XX
WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 3493; 985pp; English.
XX
XX The invention comprises an antisense oligonucleotide that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAA 2726
Db 19 TCAAAAA 1
RESULT 1265
ADK74413/c
ID ADK74413 standard; DNA; 20 BP.
XX
AC ADK74413;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1747.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberts SL;
XX
WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 1747; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, arthritic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, chronic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAA 2726
Db 19 TCAAAAA 1

RESULT 1266	
ADM14371/c	
ID	ADM14371 standard; DNA; 20 BP.
AC	
XX	
AC	ADM14371;
XX	
DT	01-JUL-2004 (first entry)
XX	
XX	Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:558.
DE	
XX	
KW	chimeric; antisense oligonucleotide; phosphorothioate; human;
KW	microsomal prostaglandin E2 synthase, mPGES-1; mPGES-1 inhibitor;
KW	microsomal prostaglandin E2 synthase inhibitor; cytotatic; antidiabetic;
KW	immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW	neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW	immunomodulatory; cardiovascular; gene therapy; inflammation;
KW	Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW	reperfusion injury; ophthalmic disorder; immunological disorder;
KW	cardiovascular disorder; neurological disorder; ss.
XX	
OS	Homo sapiens.
OS	Synthetic.
XX	
FH	Key
FT	Location/Qualifiers
FT	modified_base 1..20
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "phosphorothioate linkages and all cytidine
FT	residues are 5-methylcytidines"
FT	modified_base 1..5
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "2'-O-methoxyethyls"
FT	modified_base 16..20
FT	/*tag= c
FT	/mod_base= OTHER
FT	/note= "2'-O-methoxyethyls"
XX	WO2004/028458-A2.
XX	
XX	
PD	08-APR-2004.
XX	
PF	25-SEP-2003; 2003WO-US030374.
XX	
PR	25-SEP-2002; 2002US-0413549P.
XX	
PA	(PHAA) PHARMACIA CORP.
XX	
PI	Gierse JK;
XX	
DR	WPI; 2004-305094/28.
XX	
XX	New antisense compound, having a sequence targeted to a nucleic acid
PT	encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT	inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT	ischemia.
XX	
PS	Claim 4; SEQ ID NO 558; 132pp; English.
XX	
CC	The present sequence represents a chimeric antisense oligonucleotide
CC	targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC	human mPGES-1 gene is located on chromosome 9, more specifically to
CC	9q34.3. The present invention also describes: (1) antisense compounds,
CC	having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC	mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC	inhibits its expression; (2) a method of inhibiting the expression of
CC	mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC	having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC	antisense oligonucleotides and antisense compounds have cytostatic,
CC	antidiabetic, immunomodulator, cardiant, neuroprotective,
CC	antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX

SQ Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAA 2725
| | | | | | | | | | | | | |
Db 19 CCAAAAAATAAAAAAAAAAA 1

RESULT 1267
ADP69305/c

ID ADP69305 standard; DNA; 20 BP.

XX AC ADP69305;

XX DT 09-SEP-2004 (first entry)

XX DE Human mitoNEET-specific antisense oligonucleotide #199.

XX KW human; antisense oligonucleotide; mitochondrial membrane;
KW insulin sensitising antidiabetic thiazolidinediones; mitoNEET; diabetes;
KW immunological disorder; cardiovascular disorder; including hypertension;
KW neurological disorders; ischaemia; reperfusion; ss;
KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
XX

OS Homo sapiens.

XX WO2004053060-A2.

XX PD 24-JUN-2004.

XX PF 25-NOV-2003; 2003WO-US037621.

XX PR 06-DEC-2002; 2002US-0431529P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Colca JR;

XX DR WPI; 2004-469836/44.

XX FT New antisense oligonucleotides encoding mitoNEET, useful for modulating
FT mitoNEET expression or for treating diseases associated with mitoNEET,
FT e.g. diabetes, immunological disorders or cardiovascular disorders.
XX

PS Claim 4; SEQ ID NO 199; 226pp; English.

XX The invention comprises antisense oligonucleotides that are targeted to
CC the nucleic acids encoding a family of human proteins from mitochondrial
CC membranes, which bind insulin sensitising, antidiabetic
CC thiazolidinediones (referred to as: mitoNEET). The antisense
CC oligonucleotides of the invention are useful for modulating mitoNEET
CC expression and for treating diseases or conditions associated with
CC mitoNEET, such as: diabetes, immunological disorders, cardiovascular
CC disorders including hypertension, neurological disorders, and
CC ischaemia/reperfusion injuries. The present DNA sequence represents a
CC mitoNEET-specific antisense oligonucleotide of the invention. NOTE: The
CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
CC phosphorothioate backbone.
XX

SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;


```
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 0 C; 4 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
Db | | | | | | | | | | | | | | | | | |
19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1274
AAQ75634/c
ID AAQ75634 standard; DNA; 21 BP.
XX
XX AAQ75634;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
Db | | | | | | | | | | | | | | | | | |
19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1275
AAQ75741/c
ID AAQ75741 standard; DNA; 21 BP.
XX
XX AAQ75741;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725
Db | | | | | | | | | | | | | | | | | |
19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1276
AAQ75763/c
ID AAQ75763 standard; DNA; 21 BP.
XX
XX AAQ75763;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX
```

```

PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 TGAATAAAAAAAAAAAAAAAAA 1

RESULT 1277
AAQ75742/c
ID AAQ75742 standard; DNA; 21 BP.
XX
AC AAQ75742;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAATAAAAAAAAAAAAAA 2725
Db 19 CGAAAAATAAAAAAAAAAAAA 1

RESULT 1278
AAQ75747/c
ID AAQ75747 standard; DNA; 21 BP.
XX
AC AAQ75747;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAATAAAAAAAAAAAAAA 2725
Db 19 CGAAAAATAAAAAAAAAAAAA 1

RESULT 1279
AAQ75758/c
ID AAQ75758 standard; DNA; 21 BP.
XX
AC AAQ75758;

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CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAA 2726
Db 19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1285
AAQ75619/c
ID AAQ75619 standard; DNA; 21 BP.
XX
AC AAQ75619;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2725
Db 19 CCAATAAAAAAAAAAAAAAAAAA 1

RESULT 1286
AAQ75621/c
ID AAQ75621 standard; DNA; 21 BP.
XX
AC AAQ75621;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2725
Db 19 CCAATAAAAAAAAAAAAAAAAAA 1

RESULT 1287
AAQ75635/c
ID AAQ75635 standard; DNA; 21 BP.
XX
AC AAQ75635;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
    Query Match          0.6%; Score 17.4; DB 1; Length 21;
    Best Local Similarity 94.7%; Pred. No. 1e+03;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 TCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1288
AAQ75759/c
ID AAQ75759 standard; DNA; 21 BP.
XX
AC AAQ75759;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
    Query Match          0.6%; Score 17.4; DB 1; Length 21;
    Best Local Similarity 94.7%; Pred. No. 1e+03;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726

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Db 19 TCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1289
AAQ75782/c
ID AAQ75782 standard; DNA; 21 BP.
XX
AC AAQ75782;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;
    Query Match          0.8%; Score 17.4; DB 1; Length 21;
    Best Local Similarity 94.7%; Pred. No. 1e+03;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1290
AAQ75750/c
ID AAQ75750 standard; DNA; 21 BP.
XX
AC AAQ75750;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX

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PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 8; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAATAAAAAAAAAA 2725
 Db 19 CGAAAAAATAAAAAAAAAA 1

RESULT 1291
 AAQ75613/c
 ID AAQ75613 standard; DNA; 21 BP.
 XX
 AC AAQ75613;
 XX
 XX 04-AUG-1995 (first entry)
 DT
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 5; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAATAAAAAAAAAA 2725
 Db 19 CCAAAAAATAAAAAAAAAA 1

RESULT 1292
 AAQ75638/c
 ID AAQ75638 standard; DNA; 21 BP.
 XX
 AC AAQ75638;
 XX
 XX 04-AUG-1995 (first entry)
 DT
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 6; 11pp; Japanese.
 PS
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 Db 19 TCAAAAAATAAAAAAAAAA 1

RESULT 1293
 AAQ75749/c
 ID AAQ75749 standard; DNA; 21 BP.
 XX
 AC AAQ75749;
 XX
 XX 04-AUG-1995 (first entry)
 DT


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Db      19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1296
AAV17253/c
ID      AAV17253 standard; DNA; 21 BP.
XX
XX
AC      AAV17253;
XX
DT      28-MAY-1998 (first entry)
XX
DE      Primer KC-1 for vector construction.
XX
KW      PCR primer; integration cassette; site-specific recombination sequence;
KW      genetic modification; site-specific genomic insertion; ss.
XX
OS      Synthetic.
XX
PN      WO9746691-Al.
XX
PD      11-DEC-1997.
XX
PF      30-MAY-1997; 97WO-CA000375.
XX
PR      03-JUN-1996; 96US-00656838.
XX
PA      (UYLA-) UNIV LAVAL.
XX
PI      Gagne M, Sirard M, Pothier F;
XX
WPI; 1998-042199/04.
XX
DNA construct for genetic modification of eukaryotic cells - comprising
PT      integration cassette flanked by site-specific recombination sequences.
PT
XX
XX      Example 1; Page 17; 36pp; English.
XX
XX      This sequence represents a primer used in the preparation of the DNA
XX      construct of the invention. The construct is for inserting a DNA fragment
XX      of interest into a eukaryotic host cell, and comprises an integration
XX      cassette flanked by site-specific recombination sequences in which is
XX      inserted the DNA of interest, where the DNA fragment of interest is
XX      flanked by a nucleotide sequence sharing homology to a nucleotide
XX      sequence present in more than one copy in the eukaryotic cell. the
XX      construct is used for genetic modification of diploid plant and animal
XX      cells. The integration cassette improves the genomic insertion of the DNA
XX      fragment of interest in a site-specific manner
XX
XX      Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match      0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      275 ATTGAGGAATTGGGAGG 293
      |||||
Db      19 ATTGAGGAATTGGGAGG 1

RESULT 1297
ADP04929/c
ID      ADP04929 standard; DNA; 18 BP.
XX
XX
AC      ADP04929;
XX
DT      29-JUL-2004 (first entry)
XX
DE      PCR primer 1 used to amplify sea squirt DNA.
XX
KW      primer; ss; sea squirt; regeneration medicine; gene therapy;
KW      cell proliferation; differentiation; reproduction;
KW      environmental measurement; water survey; PCR.
XX
XX
Ciona intestinalis.
OS
XX      JP2004057129-A.
PN
XX
XX      26-FEB-2004.
PD
XX
XX      31-JUL-2002; 2002JP-00222593.
PF
XX
XX      31-JUL-2002; 2002JP-00222593.
PR
XX      (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
PA
XX      WPI; 2004-287079/27.
XX
XX      Novel gene cluster which is specifically expressed in tissue or organ
PT      during developmental phase of sea squirt, useful for elucidation of
PT      mechanism of development of tissue or organ of sea squirt.
XX
XX      Disclosure; Page 38; 1846pp; Japanese.
PS
XX
XX      This invention relates to novel genes and the encoded proteins thereof
CC      that are derived from the sea squirt Ciona intestinalis. Specifically, it
CC      refers to those genes that are expressed in the tissues or organs of the
CC      sea squirt during its developmental phase. The present invention
CC      describes the identification of these genes as useful for elucidation of
CC      the mechanism of development and hence for developing regeneration
CC      medicines and gene therapy techniques. Accordingly, they can be used in
CC      the research of various genetic diseases, as well as the analysis of cell
CC      proliferation, differentiation and reproduction. Furthermore, such
CC      compositions can be useful for environmental measurements and water
CC      surveys, particularly for sea water surveys, and also for the preparation
CC      of transformed sea squirt for improving edibility of sea squirt such as
CC      Halocynthia roretzi. This oligonucleotide sequence is a PCR primer used
CC      to amplify sea squirt DNA given in an exemplification of the invention.
XX
XX      Sequence 18 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 1 Other;
XX
Query Match      0.6%; Score 17.2; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 9.7e+02;
Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAA 2725
      :|||||
Db      18 BAAAAAAAAAAAAAAAAA 1

RESULT 1298
AAT94431
ID      AAT94431 standard; mRNA; 19 BP.
XX
XX
AC      AAT94431;
XX
XX
DT      02-MAR-1998 (first entry)
XX
XX
DE      Template mRNA poly-A tail SEQ ID NO:1 from WO9729211.
XX
XX
KW      Primer; detection; characterisation; mRNA; restriction display PCR;
KW      synthesis; cDNA; ss.
XX
XX
OS      Synthetic.
OS
XX      Homo sapiens.
XX
XX      WO9729211-Al.
PN
XX
XX      14-AUG-1997.
PD
XX
XX      07-FEB-1997; 97WO-US002009.
PF
XX
XX      09-FEB-1996; 96US-0011379P.
PR
XX      (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX      Weinstein JN, Boulamwini J;
PI

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XX DR WPI; 1997-415362/38.
XX PT Detection and characterisation of mRNA by restriction display PCR -
XX PT comprising synthesis of cDNA, digestion with a restriction endonuclease,
XX PT ligation to an adaptor DNA and PCR amplification.
XX PS Disclosure; Page 24; 40pp; English.
XX CC A method has been improved for detecting and characterising mRNA
XX CC molecules which includes synthesising a double stranded (ds) cDNA from
XX CC isolated mRNA, digesting the ds cDNA with a restriction endonuclease to
XX CC produce cDNA fragments in which at least one end of the cDNA fragments
XX CC has a sequence capable of hybridising to an adaptor DNA sequence. The
XX CC improvement comprises: (a) hybridising adaptor DNA sequences to at least
XX CC one end of the cDNA fragments; (b) ligating the adaptor DNA sequences to
XX CC the cDNA fragments; (c) amplifying the cDNA fragments having ligated
XX CC adaptor DNA sequences by a PCR using primers that hybridise to the ends
XX CC of the cDNA fragments, where the primers have at least one nucleotide at
XX CC the 3' end that specifically hybridises to a subset of cDNA molecules;
XX CC and (d) detecting the presence of the resulting amplified cDNA fragments.
XX CC The present sequence represent a template poly-A tail used in the present
XX CC specification. The method designate restriction display PCR can be used
XX CC for characterising cells based on their mRNA content, for representing
XX CC expressed genes, and for discovery of therapeutics that alter cellular
XX CC gene expression. The method is also useful for characterising cells of a
XX CC variety of types and under a variety of physiological conditions. The
XX CC method is also useful for identifying cells or tissue from particular
XX CC individuals or species based on the fingerprint obtained from the mRNA
XX CC content of isolated cells or tissue and comparing it to cells or tissue
XX CC from a known source
XX SQ Sequence 19 BP; 17 A; 0 C; 0 G; 0 T; 0 U; 2 Other;

Query Match 0.6%; Score 17.2; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1e+03;
Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db :|||||
2 BAAAAAAAAAAAAAAAAA 19

RESULT 1299
AAAX18390/c
AC AAX18390 standard; DNA; 19 BP.
AC AAX18390;
XX 11-MAY-1999 (first entry)
XX RT-PCR primer of the invention SEQ ID 31.
XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX Synthetic.
XX JPI1032765-A.
XX 09-FEB-1999.
XX 18-JUL-1997; 97JP-00208312.
XX 18-JUL-1997; 97JP-00208312.
XX (TAKI ) TAKARA SHUZO CO LTD.
XX WPI; 1999-183822/16.
XX Peptides having at least two new nucleotides - useful as primers in RT-
XX PT PCR.
XX Example 1; Page 12; 19pp; Japanese.

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```

XX CC This sequence represents a primer of the invention. The invention relates
XX CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
XX CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
XX CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
XX CC natural number indicating the repetition of alpha; beta, delta = V or N;
XX CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
XX CC thymine; gamma = thymine; k = natural number of 3 or over indicating the
XX CC repetition of gamma, in which thymine expressed by gamma is composed of
XX CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
XX CC useful as primers for RT-PCR and determination of base sequences. The new
XX CC sequences allow for reproductive and highly efficient analysis of gene
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 2 Other;

Query Match 0.6%; Score 17.2; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1e+03;
Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
Db :|||||
18 BAAAAAAAAAAAAAAAAA 1

RESULT 1300
AAA25450/c
ID AAA25450 standard; DNA; 17 BP.
AC AAA25450;
XX 19-JUL-2000 (first entry)
XX Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1948.
XX Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
XX gene expression modification; cancer; phosphorothioate; endonuclease;
XX anticancer; breast cancer; endometrium cancer; ss.
XX Homo sapiens.
XX WO9954459-A2.
XX 28-OCT-1999.
XX 19-APR-1999; 99WO-US008547.
XX 20-APR-1998; 98US-0082404P.
XX 23-JUN-1998; 98US-00103636.
XX (RIBO-) RIBOZYME PHARM INC.
XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
XX Matulic-Adamic J;
XX WPI; 2000-013248/01.
XX New nucleic acids that interact, and optionally cleave, target sequences,
XX used to treat cancer.
XX Claim 77; Page 79; 148pp; English.
XX The present invention describes nucleic acids (A) that interact stably
XX CC with a target sequence and contain at least one phosphorodi(thioate
XX CC link, having endonuclease activity. (A), and more generally any catalytic
XX CC nucleic acid (A') that modulates expression of the oestrogen receptor
XX CC gene, are used to treat cancer (particularly of breast or endometrium),
XX CC in vivo or by transforming cells ex vivo and implanting treated cells, or
XX CC for other conditions associated with levels of oestrogen receptor.
XX CC Because of the high selectivity for targeted RNA, (A) can also be used to
XX CC correlate inhibition of gene expression with alterations in phenotype,

```


CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAA 1
 RESULT 1301
 AAA98232/C
 ID AAA98232 standard; DNA; 17 BP.
 AC AAA98232;
 XX
 DT 30-JAN-2001 (first entry)
 XX
 DE Human retrovirus HERV LTR PCR primer #31.
 XX
 DE Cell-specific expression; tissue-specific expression; gene therapy; LTR;
 KW U3-R segment; long terminal repeat; retroviral expression vector;
 KW PCR primer; ss.
 KW
 XX Human endogenous retrovirus.
 OS
 XX
 PN WO200053789-A2.
 XX
 PD 14-SEP-2000.
 XX
 PF 09-MAR-2000; 2000WO-EP002064.
 XX
 PR 10-MAR-1999; 99DE-01010650.
 XX
 XX (GSFU-) GSF FORSCHUNGSZENTRUM UMWELT & GESUNDHEI.
 PA
 PI Leib-Moesch C, Schoen U, Baust C;
 XX
 DR WPI; 2000-587442/55.
 XX
 XX Retroviral expression vector, useful in gene therapy, contains a promoter
 PT from a human endogenous retrovirus to provide cell-specific expression.
 PT
 XX
 PS Disclosure; Page 27; 67pp; German.
 XX
 CC This invention describes a novel retroviral expression vector (A)
 CC containing DNA sequences (I) for packaging vector RNA and for cell-
 CC specific expression of proteins or peptides encoding by heterologous DNA
 CC (II). The sequences controlling cell-specific expression contain a cell-
 CC specifically regulatable promoter region (P) from a human endogenous
 CC retrovirus (HERV) DNA sequence. The invention also describes (a) mRNA and
 CC RNA of (A); (b) prokaryotic and eukaryotic cells containing (A); (c)
 CC eukaryotic cells containing (A) in integrated form; (d) viruses
 CC containing a retroviral expression vector RNA derived from (A); (e) a
 CC method for producing the virions of (d); (f) a method for incorporating
 CC protein-encoding nucleic acid sequences into a eukaryotic cell by
 CC infection with the virions of (d); and (g) a retroviral vector system
 CC containing (A) and a packaging cell line, that contains at least one
 CC (recombinant) retrovirus construct that encodes for the packaging
 CC proteins of (A). (A) are used for cell- or tissue-specific expression of

CC foreign genes for gene therapy and to produce virions for introducing
 CC (II) into the chromosomal DNA of eukaryotic cells, preferably mammalian
 CC and specifically human. (A) retain the advantages of usual retroviral
 CC promoters with all the signal structures required for transcription in a
 CC small region within the U3-R segment, but without their disadvantages
 CC (excessive strength and limited cell specificity). Since (A) are derived
 CC from endogenous (harmless) viral sequences, they do not introduce any new
 CC viral sequences into the genome and recombination will not create new
 CC types of retrovirus. The promoters provide cell or tissue specific
 CC expression, according to which HERV they are derived from
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAA 1
 RESULT 1302
 AAA50197/C
 ID AAA50197 standard; DNA; 17 BP.
 XX
 AC AAA50197;
 XX
 DT 07-NOV-2000 (first entry)
 XX
 DE 2'-Methoxyethoxy-modified phosphorothioate oligonucleotide.
 XX
 KW Phosphorothioate oligonucleotide; H-phosphonate chemistry; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..19
 FT /tag= a
 FT /note= "2'-methoxyethoxy modified thymidine"
 FT modified_base 1..17
 FT /tag= b
 FT /note= "phosphorothioate internucleoside linkages"
 FT
 XX WO200047593-A1.
 XX
 PD 17-AUG-2000.
 XX
 PF 11-FEB-2000; 2000WO-US003543.
 XX
 PR 12-FEB-1999; 99US-00250075.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX Manoharan M, Maier MA;
 XX
 DR WPI; 2000-558188/51.
 XX
 XX Preparation of mixed backbone oligomeric compounds useful as e.g. primers
 PT for diagnostic tests, involves oxidation of H-phosphonate internucleoside
 PT linkages to phosphodiester internucleoside linkages.
 XX
 XX Example 12; Page 34; 49pp; English.
 XX
 CC The present sequence is that of a phosphorothioate oligonucleotide
 CC containing 20 T nucleobases, each having a 2'-methoxyethoxy group on its
 CC 5' ribosyl sugar moiety. It is an example of an oligomeric compound
 CC produced according to the methods of the invention. The invention
 CC provides compounds and methods for the preparation of mixed backbone
 CC oligomeric, or chimeric, compounds having phosphodiester internucleoside
 CC linkages in addition to phosphorothioate and/or phosphoramidate
 CC internucleoside linkages. The methods also include incorporation of
 CC boranophosphate internucleoside linkages. The methods utilise H-

CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present
 CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification
 CC of the invention

SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1305
 AAD56448/C
 ID AAD56448 standard; DNA; 17 BP.
 XX
 AC AAD56448;
 XX
 DT 07-AUG-2003 (first entry)
 XX
 DE 2'-F-ANA antisense oligo #3, to elicit RNase H degradation of target RNA.

XX Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
 KW antisense; ss.
 KW Unidentified.

XX Key Location/Qualifiers
 FH modified_base 1..17
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
 FT misc_feature 9..10
 FT /tag= b
 FT /note= "Bases 9 and 10 are linked by a butanediol linker
 FT which is represented as B in page 49 and Fig 5 and as X
 FT in page 52, 55 and Fig 6 of the specification"
 XX

PN WO2003037909-A1.

XX 08-MAY-2003.

XX 29-OCT-2002; 2002WO-CA001628.

XX 29-OCT-2001; 2001US-0330719P.

XX (UYMC-) UNIV MCGILL.

XX Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;

XX WPI; 2003-421516/39.

XX Novel acyclic linker-containing oligonucleotide useful for preventing or
 PT decreasing translation, reverse transcription and/or replication of a
 PT target RNA in a system, comprises a modified deoxyribonucleotide.

PS Example 2; Fig 5; 104pp; English.

XX The invention relates to an acyclic linker-containing oligonucleotide
 CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
 CC the invention are useful for preventing or decreasing translation,
 CC reverse transcription and/or replication of a target RNA in a system.
 CC They are useful for selectively preventing gene expression in a sequence-
 CC specific manner, for hybridising to complementary RNA such as cellular
 CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
 CC RNA. They are also useful therapeutically in formulations or medicaments
 CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present

CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification
 CC of the invention

SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1306
 AAD56449/C
 ID AAD56449 standard; DNA; 17 BP.

XX AAD56449;

XX 07-AUG-2003 (first entry)

XX 2'-F-ANA antisense oligo #4, to elicit RNase H degradation of target RNA.

XX Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
 KW antisense; ss.

XX Unidentified.

XX Key Location/Qualifiers
 FH modified_base 1..17
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
 FT misc_feature 12..13
 FT /tag= b
 FT /note= "Bases 12 and 13 are linked by a butanediol linker
 FT which is represented as B in page 49 and Fig 5 and as X
 FT in page 55 and Fig 6 of the specification"
 XX

PN WO2003037909-A1.

XX 08-MAY-2003.

XX 29-OCT-2002; 2002WO-CA001628.

XX 29-OCT-2001; 2001US-0330719P.

XX (UYMC-) UNIV MCGILL.

XX Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;

XX WPI; 2003-421516/39.

XX Novel acyclic linker-containing oligonucleotide useful for preventing or
 PT decreasing translation, reverse transcription and/or replication of a
 PT target RNA in a system, comprises a modified deoxyribonucleotide.

PS Example 2; Fig 5; 104pp; English.

XX The invention relates to an acyclic linker-containing oligonucleotide
 CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
 CC the invention are useful for preventing or decreasing translation,
 CC reverse transcription and/or replication of a target RNA in a system.
 CC They are useful for selectively preventing gene expression in a sequence-
 CC specific manner, for hybridising to complementary RNA such as cellular
 CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
 CC RNA. They are also useful therapeutically in formulations or medicaments
 CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present
 CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification

```

CC of the invention
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAA 1

RESULT 1307
AAD56447/c
XX ID AAD56447 standard; DNA; 17 BP.
XX AC AAD56447;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #2, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX KW antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX modified_base 1..17
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
FT misc_feature 4..5
FT /tag= b
FT /note= "Bases 4 and 5 are linked by a butanediol linker
FT which is represented as B in page 49 and Fig 5 and as X
FT in page 55 and Fig 6 of the specification"
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX WPI; 2003-42f516/39.
XX DR
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 5; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX H degradation of target RNA. This sequence is used in the exemplification
XX of the invention

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SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAA 1

RESULT 1308
AAD56450/c
XX ID AAD56450 standard; DNA; 17 BP.
XX AC AAD56450;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #5, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX KW antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX modified_base 1..17
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
FT misc_feature 9..10
FT /tag= b
FT /note= "Bases 9 and 10 are linked by a secouridine linker
FT which is represented as S in page 49 and X in page 57 and
FT Fig 1, 2, 7 and 8 of the specification"
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX WPI; 2003-421516/39.
XX DR
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 7; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX H degradation of target RNA. This sequence is used in the exemplification
XX of the invention
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

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KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX Unidentified.
OS WO200281628-A2.
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX 05-APR-2001; 2001US-00827395.
XX 29-MAY-2001; 2001US-0294412P.
XX 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 2175; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX
XX
XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2535 GGCCTTGCTCTCAGCCA 2551
Db 17 GGCCTTGCTCTCAGCCA 1

RESULT 1312
ADI34488/c
ID ADI34488 standard; DNA; 17 BP.
AC ADI34488;
XX
XX 22-APR-2004 (first entry)
DT
DE Nucleotide sequence of an oligo dT17.
XX
XX Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX

OS Synthetic.
XX WO2003102243-A1.
XX 11-DEC-2003.
XX 30-MAY-2003; 2003WO-US017103.
XX 31-MAY-2002; 2002US-0384454P.
XX (JANC) JANSSEN PHARM NV.
XX Kamme FC, Zhu JY;
XX WPI; 2004-035466/03.
XX
XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
PT RNA transcription from a polynucleotide template, comprises eliminating
PT single-stranded oligonucleotide from the transcription sample.
XX
XX Example 1; SEQ ID NO 7; 26pp; English.
XX
XX The invention relates to amplifying for RNA in a sample comprises
CC eliminating single-stranded oligonucleotide from the transcription
CC sample. The method involves synthesizing single-stranded cDNA by
CC incubating the sample RNA with reverse transcriptase and an
CC oligonucleotide primer that primes synthesis in a direction toward 5' end
CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
CC to form a transcription sample containing a cDNA template; eliminating
CC single-stranded oligonucleotide from the transcription sample; and
CC transcribing the cDNA template into RNA using an RNA polymerase. The
CC method is useful for improving RNA polymerase based RNA transcription
CC from a polynucleotide template. The method inhibits the undesired non-
CC template derived production of RNA in the transcription reaction.
CC Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
CC transcription reaction.
XX
XX Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1313
ADO04016
ID ADO04016 standard; DNA; 17 BP.
XX
XX ADO04016;
XX
XX 29-JUL-2004 (first entry)
DT
DE Annealing primer used to generate single-stranded labelled UNA.
XX
XX Intramolecular base pair; intermolecular base pair;
KW unstructured nucleic acid; UNA; molecular biology;
KW nucleic acid chemistry; polymerase extension reaction; PCR; primer; ss.
XX
XX Unidentified.
XX
XX US2004086880-A1.
XX
XX 06-MAY-2004.
XX
XX 18-DEC-2002; 2002US-00324409.
XX
XX 20-JUL-1999; 99US-00358141.
XX 31-JUL-2000; 2000US-00632639.
XX


```

PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
PS Example; SEQ ID NO 8; 104pp; English.
PS
XX The invention relates to a class of CpG immunostimulatory
XX oligonucleotides containing a 5' TCG motif or a CG at or the 5' end that
XX are useful for stimulating an immune response. Oligonucleotides and
XX compositions of the invention are useful for treating allergy or asthma,
XX viral and bacterial infections and cancer e.g. biliary tract cancer,
XX breast cancer, cervical cancer, choriocarcinoma, colon cancer,
XX endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
XX liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
XX neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
XX rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
XX and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
XX Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
XX testicular cancer, as well as other carcinomas and sarcomas. The
XX invention is also useful in gene therapy. The present sequence is a CpG
XX immunostimulatory oligonucleotide.
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1316
AEC07079/c
ID AEC07079 standard; DNA; 17 BP.
XX
AC AEC07079;
XX
XX 17-NOV-2005 (first entry)
XX
XX Poly dT primer SEQ ID NO:3.
XX
XX DNA amplification; hybridization; primer; ss.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..17
FT /*tag= a
FT /note= "phosphorylated poly dT, which binds to a bridging
FT oligonucleotide"
XX
PN US2005202461-A1.
XX
XX 15-SEP-2005.
XX
XX 27-SEP-2004; 2004US-00951549.
XX
XX 08-MAR-2000; 2000US-0187681P.
XX 19-JUL-2000; 2000US-0219397P.
XX 20-SEP-2000; 2000US-0234060P.
XX 13-JAN-2001; 2001US-0261231P.
XX 08-MAR-2001; 2001US-00802162.
XX 19-JUL-2001; 2001US-00908950.
XX 20-SEP-2001; 2001WO-US029589.
XX 14-JAN-2002; 2002US-00050088.
XX 25-MAR-2002; 2002US-0367438P.
XX 20-MAR-2003; 2003US-00393519.
XX 25-MAR-2003; 2003WO-US009232.
XX 08-DEC-2003; 2003US-00730823.
XX 16-APR-2004; 2004US-00825776.
XX

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PA (GETT/) GETTS R C.
PA (RADU/) KADUSHIN J.
PA (SCHW/) SCHWALM J.
PA (HOWE/) HOWERTON K.
XX
PI Getts RC, Kadushin J, Schwalm J, Howerton K;
XX
XX WPI; 2005-618097/63.
XX
XX Assaying the presence of specific nucleic acids sequences using primer
XX oligonucleotides having a first bridging sequence with a primer portion
XX composed of random nucleotides.
XX
XX Disclosure; SEQ ID NO 3; 13pp; English.
XX
XX The invention relates to a method for determining the presence of at
XX least one specific nucleotide sequence in a target nucleic acid extracted
XX from a biological sample comprising preparing a primer oligonucleotide
XX comprising a first bridging sequence with a primer portion composed of
XX random nucleotides attached to one end of the first bridging sequence and
XX a terminations end group attached to the other end. The methods and
XX compositions of the present invention are useful for assaying the
XX presence of specific nucleic acids sequences, particularly for
XX hybridizing nucleic acids in solutions or on surfaces like microarrays,
XX and their amplification using RNA polymerase. The present sequence
XX represents a poly dT primer, which is used in the exemplification of the
XX present invention.
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1317
AED81285/c
ID AED81285 standard; DNA; 17 BP.
XX
AC AED81285;
XX
XX 26-JAN-2006 (first entry)
XX
XX IL-10 expression assay, test oligonucleotide SEQ ID No.43.
XX
XX pharmaceutical; therapeutic; immune stimulation; immune response;
XX allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX immunosuppressive; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO2005111057-A2.
XX
XX 24-NOV-2005.
XX
XX 04-APR-2005; 2005WO-US011827.
XX
XX 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Vollmer J;
XX
XX WPI; 2005-786756/80.
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
XX autoimmune disease, arthritis, systemic lupus erythematosus, multiple
XX sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX

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XX PS Example; SEQ ID NO 43; 111pp; English.
XX
CC The invention relates to an oligonucleotide having the formula: (a) 5'
CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by
CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen, and administering an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or alleviate an allergic response to the
CC allergen in the subject; (6) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, scleroderma,
CC disease of the adrenal gland, rheumatoid arthritis, dermatomyositis,
CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
CC invention.
XX
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 9.7e+02;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
QY |||||||||||||||
XX
XX RESULT 1319
XX AAT94668/c
XX ID AAT94668 standard; DNA; 18 BP.
XX
XX AC AAT94668;
XX
XX DT 27-MAR-1998 (first entry)
XX
XX DE Anchored poly(T) oligonucleotide polyT-AnchC.
XX

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Db 17 AAAAAAAAAAAAAAAAAA 1
Db
Db RESULT 1318
Db AEF82502/c
Db ID AEF82502 standard; DNA; 17 BP.
Db
Db AC AEF82502;
Db
Db DT 20-APR-2006 (first entry)
Db
Db DE Common marmoset 18S ribosome PCR primer SEQ ID NO:4.
Db
Db KW 18S ribosomal RNA; 18S rRNA; RNA detection; DNA detection; expression;
Db SS; PCR; primer.
Db
Db OS Synthetic.
Db
Db PN JP2006042804-A.
Db
Db PD 16-FEB-2006.
Db
Db PF 04-MAR-2005; 2005JP-00060329.
Db
Db PR 09-JUL-2004; 2004JP-00202891.
Db
Db PA (SUMO ) SUMITOMO CHEM CO LTD.
Db
Db PI Yamada T, Oeda K;
Db
Db DR WPI; 2006-150097/16.
Db
Db PT Novel 18S ribosome RNA gene derived from common marmoset, or its partial
Db fragment, useful as internal standard for measuring difference in
Db expression level of gene of interest in two or more types of test
Db samples.
Db
Db PS Disclosure; SEQ ID NO 4; 21pp; Japanese.
Db
Db XX The invention relates to a novel 18S ribosome RNA gene (I) derived from a
Db common marmoset, or its partial fragment (AEF82499). Also claimed is a
Db composition for detecting DNA or RNA, comprising the 18S rRNA gene. The
Db 18S rRNA gene is useful as an internal standard or a reference of the
Db expression level of a gene in the test sample during the measurement of
Db the difference in the expression level of a gene of interest in two or
Db more types of test sample, based on the difference in the transcription
Db product amount of the gene, where the test sample is derived from a
Db common marmoset. The transcription product amount of the gene of interest
Db is measured using a DNA array or by quantitative reverse transcriptase-
Db PCR. The present sequence represents a PCR primer used in the invention
Db to synthesise 18S rRNA cDNA.
Db
Db SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
Db
Db Query Match 0.6%; Score 17; DB 1; Length 17;
Db Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Db Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Db
QY 2709 AAAAAAAAAAAAAAAAAA 2725
QY |||||||||||||||
Db 17 AAAAAAAAAAAAAAAAAA 1
Db
Db RESULT 1319
Db AAT94668/c
Db ID AAT94668 standard; DNA; 18 BP.
Db
Db AC AAT94668;
Db
Db DT 27-MAR-1998 (first entry)
Db
Db DE Anchored poly(T) oligonucleotide polyT-AnchC.
Db

```

KW Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
 KW snapdragon; primer; ss.
 XX Synthetic.
 XX WO9732023-A1.
 XX
 XX PD 04-SEP-1997.
 XX
 XX PF 28-FEB-1997; 97WO-AU000124.
 XX
 XX PR 01-MAR-1996; 96AU-00008386.
 XX
 XX PA (FLOR-) FLORIGENE LTD.
 XX
 XX PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.
 XX
 XX PT Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 XX corresponding DNA, used in the manipulation of pigmentation in plants.
 XX
 XX PS Example 15; Page 59; 234pp; English.
 XX
 XX CC Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3'-hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX
 XX SQ Sequence 18 BP; 0 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1320
 AAT94669/C
 ID AAT94669 standard; DNA; 18 BP.
 AC AAT94669;
 XX
 XX DT 27-MAR-1998 (first entry)
 XX
 XX DE Anchored poly(T) oligonucleotide polyT-anchG.
 XX
 XX KW Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
 KW snapdragon; primer; ss.
 XX Synthetic.
 XX WO9732023-A1.
 XX
 XX PD 04-SEP-1997.
 XX
 XX PF 28-FEB-1997; 97WO-AU000124.
 XX
 XX PR 01-MAR-1996; 96AU-00008386.
 XX
 XX PA (FLOR-) FLORIGENE LTD.
 XX
 XX PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.

XX
 PT Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 XX
 XX PS Example 15; Page 59; 234pp; English.
 XX
 XX CC Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3'-hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX
 XX SQ Sequence 18 BP; 0 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1321
 AAV54170/C
 ID AAV54170 standard; cDNA; 18 BP.
 XX
 XX AC AAV54170;
 XX
 XX DT 21-DEC-1998 (first entry)
 XX
 XX DE Nucleotide sequence PCR primer 7.
 XX
 XX KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
 KW immunohistological staining.
 XX
 XX OS Synthetic.
 XX
 XX PN WO9839437-A1.
 XX
 XX PD 11-SEP-1998.
 XX
 XX PF 05-MAR-1998; 98WO-JP000905.
 XX
 XX PR 05-MAR-1997; 97JP-00050302.
 XX
 XX PA (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 XX PI Sakaki Y;
 XX
 XX DR WPI; 1998-495844/42.
 XX
 XX PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
 PT treating diseases associated with apoptosis.
 XX
 XX PS Example 1; Page 49; 70pp; Japanese.
 XX
 XX CC This is the nucleotide sequence of a PCR primer used in the method of the
 CC invention, involving the use of novel apoptosis-related DNAs and
 CC proteins. The inventions can be used as diagnostic reagents for apoptosis
 CC e.g. (monoclonal) antibodies for the protein, as a reagent in
 CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases
 XX
 XX SQ Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      2707 CTAAGAAAAA 2723
Db      18 CTAAGAAAAA 2

RESULT 1322
AAV37712
ID      AAV37712 standard; cDNA; 18 BP.
XX
AC      AAV37712;
XX
XX      25-MAR-2003 (revised)
DT      07-SEP-1998 (first entry)
XX
XX      Human protein AQ2_1i 3'-portion and polyA tail.
XX
XX      Human; secreted protein; murine adult spleen; human foetal kidney; ovary;
KW      bone marrow; thymus; AE648_1i; AE693_1i; AK438_1i; AK609_1i; AM1060_1i;
KW      AQ2_1i; K433_1i; L256_1i; Prevent; treat; ameliorate; medical; ds.
XX
XX      Homo sapiens.
OS
XX      WO9820130-A2.
PN
XX      14-MAY-1998.
PD
XX      31-OCT-1997; 97WO-US019857.
PF
XX      01-NOV-1996; 96US-00742973.
PR      29-OCT-1997; 97US-00960024.
XX
XX      (GEMY ) GENETICS INST INC.
PA
XX      Jacobs K, McCoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;
PI      Spaulding V, Agostino MJ;
PI
XX      WPI; 1998-286946/25.
DR
XX      New secreted proteins and associated polynucleotides - obtained from
PT      murine adult spleen, human foetal kidney, human ovary, murine bone marrow
PT      and murine adult thymus.
XX
XX      Disclosure; Page 58; 75pp; English.
XX
XX      The present invention describes novel proteins isolated from cDNA clones:
CC      AE648_1i; AE693_1i; AK438_1i; AK609_1i; AM1060_1i; AQ2_1i; K433_1i; or
CC      L256_1i, deposited as ATCC 98237. The present sequence represents the 3'-
CC      portion of AQ2_1i isolated from a human ovary cDNA library. The proteins
CC      from the present invention may be administered in a composition to
CC      prevent, treat or ameliorate a medical condition. The proteins may
CC      exhibit biological activities such as nutritional activity, cytokine and
CC      cell proliferation/differentiation activity, immune stimulating or
CC      suppressing activity, haematopoiesis regulating activity, tissue growth
CC      activity, activin/inhibin activity, chemotactic/chemokinetic activity,
CC      haemostatic and thrombotic activity, receptor/ligand activity, anti-
CC      inflammatory activity, cadherin/tumour invasion suppressor activity,
CC      tumour inhibition activity and other activities. (Updated on 25-MAR-2003
CC      to correct PR field.)
XX
XX      Sequence 18 BP; 17 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
SQ
Query Match      0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAA 2725
Db      2 AAAAAA 18

RESULT 1323
AAV07750
ID      AAV07750 standard; DNA; 18 BP.
XX
AC      AAV07750;
XX
XX      02-DEC-1998 (first entry)
DT
XX      Phosphorothioate oligodeoxynucleotide.
XX
XX      phosphorothioate; electrospray ionisation-Fourier transform;
KW      mass spectrometry; off-resonance excitation; ss.
KW
XX      Synthetic.
OS
XX      Key      Location/Qualifiers
FH      misc_difference 1..18
FT      /*tag= a
FT      /note= "phosphorothioate internucleotide linkages"
XX
XX      WO9840520-A1.
PN
XX      17-SEP-1998.
PD
XX      12-MAR-1998; 98WO-US004919.
PF
XX      14-MAR-1997; 97US-0040717P.
PR
XX      (HYBR-) HYBRIDON INC.
PA
XX      Wang BH;
PI
XX      WPI; 1998-520830/44.
DR
XX      Determining the nucleotide sequence of a nucleic acid analyte - using
PT      electro-spray ionisation.
XX
XX      Example 1; Fig 3A; 25pp; English.
XX
XX      The invention relates to an analytical method for determining the
CC      nucleotide sequence of nucleic acid analytes, including chemically
CC      modified oligonucleotides. This new method utilises electrospray
CC      ionisation-Fourier transform mass spectrometry. The ions are excited by
CC      sustained off-resonance excitation with single shot excitation, and the
CC      target fragmented by collisionally activated dissociation by a neutral
CC      gas, e.g. carbon dioxide. Alternatively, the excitation and dissociation
CC      can be nozzle skimmer dissociation. The method is used in molecular
CC      biology and biomedical applications. The method, utilising electrospray
CC      ionisation-Fourier transform ion cyclotron resonance mass spectrometry,
CC      is extremely rapid and acts directly on the oligonucleotide. The method
CC      is effective for a variety of nucleic acid analytes, particularly
CC      chemically modified oligonucleotides which have not previously been
CC      successfully sequenced. The present sequence represents a
CC      phosphorothioate oligodeoxynucleotide
XX
XX      Sequence 18 BP; 17 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match      0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAA 2725
Db      1 AAAAAA 17

RESULT 1324
AAK18373/c
ID      AAK18373 standard; DNA; 18 BP.
XX
XX      AAK18373;
AC
XX      11-MAY-1999 (first entry)
DT
XX      RT-PCR primer of the invention SEQ ID 14.
DE

```

KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 OS Synthetic.
 XX JP11032765-A.
 PN 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 PF 18-JUL-1997; 97JP-00208312.
 PR (TAKI) TAKARA SHUZO CO LTD.
 PA WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.
 PT
 PS Disclosure; Page 11; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
 CC
 CC Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2724
 Db 17 TAAAAAATAAAAAAAAAA 1
 RESULT 1326
 AAX18372/C
 ID AAX18372 standard; DNA; 18 BP.
 AC AAX18372;
 XX 11-MAY-1999 (first entry)
 DT RT-PCR primer of the invention SEQ ID 13.
 DE RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 KW Synthetic.
 OS JP11032765-A.
 PN 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 PF 18-JUL-1997; 97JP-00208312.
 PR (TAKI) TAKARA SHUZO CO LTD.
 PA WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.
 PT
 PS Disclosure; Page 11; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
 CC
 CC Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2724
 Db 17 TAAAAAATAAAAAAAAAA 1
 RESULT 1326
 AAX18372/C
 ID AAX18372 standard; DNA; 18 BP.
 AC AAX18372;
 XX 11-MAY-1999 (first entry)
 DT RT-PCR primer of the invention SEQ ID 13.
 DE RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 KW Synthetic.
 OS JP11032765-A.
 PN 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 PF 18-JUL-1997; 97JP-00208312.
 PR (TAKI) TAKARA SHUZO CO LTD.
 PA WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.
 PT
 PS Disclosure; Page 11; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
 CC
 CC Sequence 18 BP; 2 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2724
 Db 17 TAAAAAATAAAAAAAAAA 1
 RESULT 1326
 AAA40563
 ID AAA40563 standard; cDNA; 18 BP.
 AC AAA40563;
 XX 16-NOV-2000 (first entry)
 DT Human adult ovary cDNA fragment AQ2_11 #2.
 DE Secreted protein; cytostatic; immunostimulatory; antimicrobial; antiviral; immunosuppressive; antiinflammatory; vulnery; cytokine; cell proliferation; differentiation; regulator; treatment; tumor; autoimmune disease; inflammatory disorder; wound; microbial infection; viral disease; graft versus host reaction suppression; ss.
 KW Homo sapiens.
 OS WO200037630-A1.
 PN 29-JUN-2000.
 PD 22-DEC-1999; 99WO-US031005.
 PF 23-DEC-1998; 98US-00220876.
 PR (GEMY) GENETICS INST INC.
 PA Jacobs K, Mccoy JW, Lavallie ER, Collins-Racie LA, Evans C;
 PI Merberg D, Treacy M, Bowman MR;
 XX WPI; 2000-442661/38.
 DR P-PSDB; AAB10274.
 XX Secreted human proteins AS296-11 and AS34-11, useful for treating tumors, autoimmune diseases, inflammatory disorders, wounds, microbial infections and viral diseases.
 PT
 PT Disclosure; Page 269; 293pp; English.
 PS This invention describes novel secreted human proteins (I) which have cytostatic, immunostimulatory, antimicrobial, antiviral, immunosuppressive, antiinflammatory and vulnery activity and which act as cytokine, cell proliferation or differentiation regulators. (I) is useful for treating tumors, autoimmune diseases, inflammatory disorders,

CC wounds, microbial infections and viral diseases. (I) is also useful for
 CC suppressing graft versus host reaction. AAA0490-A40580 represent cDNA
 CC fragments that encode the secreted proteins AAB10226-B10288 described in
 CC the method of the invention

XX
 SQ Sequence 18 BP; 17 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 2 AAAAAAAAAAAAAAAAAA 18

RESULT 1327
 AAZ90640/c
 ID AAZ90640 standard; DNA; 18 BP.

XX AAZ90640;

XX 13-JUN-2000 (first entry)

XX Human adipose tissue gene amplifying primer #1.

XX Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
 XX Homo sapiens.

XX JP2000037190-A.

XX 08-FEB-2000.

XX 23-JUL-1998; 98JP-00225228.

XX 23-JUL-1998; 98JP-00225228.

XX (NISR) JAPAN TOBACCO INC.

XX WPI; 2000-306578/27.

XX A physiologically active protein specifically derived from mammal tissue.

XX Example 2; Page 18; 50pp; Japanese.

XX The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAZ90631-633) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

XX Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
 |||||
 Db 18 CTAATAAAAAAAAAAAAA 2

RESULT 1328

AAD20091

ID AAD20091 standard; mRNA; 18 BP.

XX AAD20091;

XX 03-JAN-2002 (first entry)

XX mRNA fragment used in 3' end PCR/IVT method of the invention.
 DE RNA polymerase; RNAP; RNA detection; IVT; in vitro transcription; ss.
 XX RNA polymerase; RNAP; RNA detection; IVT; in vitro transcription; ss.

XX Unidentified.

XX US6271002-B1.

XX 07-AUG-2001.

XX 04-OCT-1999; 99US-00411074.

XX 04-OCT-1999; 99US-00411074.

XX (ROSE-) ROSETTA INPHARMATICS INC.

XX Linsley PS, Schelter JW;

XX WPI; 2001-624273/72.

XX Amplifying and detecting RNA derived from a population of cells by
 PT employing a primer that contains an RNA polymerase promoter in a
 PT polymerase chain reaction.

XX Example 3; Fig 1; 29pp; English.

XX The invention relates to methods and kits for amplification of mRNA using
 CC a primer in PCR that contains an RNA polymerase (RNAP) promoter. The
 CC invention provides methods for amplification and detection of RNA derived
 CC from a population of cells, preferably eukaryotic cells and most
 CC preferably mammalian cells, which methods preserve fidelity with respect
 CC to sequence and transcript representation and additionally enable
 CC amplification of extremely small amounts of mRNA. The method and kit are
 CC useful for amplifying and detecting RNA derived from a population of
 CC cells, especially eukaryotic cells like mammals. The RNAs generated are
 CC useful for profiling gene expression in different populations of cells.
 CC The present sequence is a mRNA fragment used in 3' end PCR/IVT (in vitro
 CC transcription) method of the invention

XX Sequence 18 BP; 17 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 0; Indels 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 2 AAAAAAAAAAAAAAAAAA 18

RESULT 1329

ADX69542/c

ID ADX69542 standard; DNA; 18 BP.

XX ADX69542;

XX 21-APR-2005 (first entry)

XX Monocotyledon transformation associated PCR primer SEQ ID NO 11.

XX ss; PCR; primer; transformation; plant.

XX Synthetic.

XX KR2004036041-A.

XX 30-APR-2004.

XX 23-OCT-2002; 2002KR-00064822.

XX 23-OCT-2002; 2002KR-00064822.

PA (POST-) POSTECH FOUND.
 XX Ahn SY, An GH, An KS, Jung DH, Kang HG, Mun SO;
 XX WPI; 2004-589679/57.
 XX Preparing transformed monocotyledon rice, with t-DNA tagging vector
 PT comprising enhancer element for activation tagging and reporter gene for
 PT gene trapping.
 XX Disclosure; SEQ ID NO 11; 17bp; Korean.
 XX The invention relates to a method of preparing transformed
 CC monocotyledons. The present sequence represents a Monocotyledon
 CC transformation associated PCR primer.
 XX Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2723
 DB 17 CTAAGAAAAA 1
 RESULT 1330
 AAQ75558/c
 ID AAQ75558 standard; DNA; 19 BP.
 AC AAQ75558;
 XX
 XX 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cdna analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cdna;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cdna and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 DE Disclosure; Page 5; 11pp; Japanese.
 XX A method for the analysis of cdna comprises (a) preparing an aggregate of
 KW double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 KW labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
 XX and using the aggregate of mRNAs as the template for each reverse
 OS transcription primer; (b) digesting each of the prepared aggregates of
 XX the double-stranded cDNAs with restriction enzyme and; (c)
 PN electrophoresing the digested aggregate of cDNAs in separate lanes. The
 XX method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 19 BP; 0 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAA 2725
 DB 17 AAAAAA 1
 RESULT 1332
 ABD24924
 ID ABD24924 standard; DNA; 19 BP.
 XX
 XX ABD24924;
 AC
 XX 29-JUL-2004 (first entry)
 DT
 XX A1095492-derived oligonucleotide SEQ ID 3936.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX

QY 2709 AAAAAA 2725
 DB 17 AAAAAA 1
 RESULT 1331
 AAQ75550/c
 ID AAQ75550 standard; DNA; 19 BP.
 XX
 XX AAQ75550;
 AC
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cdna analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cdna;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cdna and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 DE Disclosure; Page 5; 11pp; Japanese.
 XX A method for the analysis of cdna comprises (a) preparing an aggregate of
 KW double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 KW labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
 XX and using the aggregate of mRNAs as the template for each reverse
 OS transcription primer; (b) digesting each of the prepared aggregates of
 XX the double-stranded cDNAs with restriction enzyme and; (c)
 PN electrophoresing the digested aggregate of cDNAs in separate lanes. The
 XX method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 19 BP; 0 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAA 2725
 DB 17 AAAAAA 1
 RESULT 1332
 ABD24924
 ID ABD24924 standard; DNA; 19 BP.
 XX
 XX ABD24924;
 AC
 XX 29-JUL-2004 (first entry)
 DT
 XX A1095492-derived oligonucleotide SEQ ID 3936.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3936; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 19 BP; 16 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2724

|||||||

Db 3 TAAAAAAAAAAAAAAAAA 19

RESULT 1333

AAQ75574/c

ID AAQ75574 standard; DNA; 20 BP.

XX AAQ75574;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; gene expression; reverse transcription; primer; cDNA;
 XX aggregate; restriction enzyme; ss.
 XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

SQ Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

|||||||

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1334

AAQ75605/c

ID AAQ75605 standard; DNA; 20 BP.

XX AAQ75605;

XX 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

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XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1335
XX AAQ75572/c
XX ID AAQ75572 standard; DNA; 20 BP.
XX AC
XX AAQ75572;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX JF06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1337
XX AAQ75573/c
XX ID AAQ75573 standard; DNA; 20 BP.
XX AC
XX AAQ75573;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db | | | | | | | | | | | | | | | |
17 AAAAAAAAAAAAAAAAAA 1
RESULT 1336
AAQ75604/c
ID AAQ75604 standard; DNA; 20 BP.
XX
XX AAQ75604;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX JF06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1337
XX AAQ75573/c
XX ID AAQ75573 standard; DNA; 20 BP.
XX AC
XX AAQ75573;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX
XX RESULT 1338
XX AAQ75606/c
XX ID AAQ75606 standard; DNA; 20 BP.
XX
XX AC AAQ75606;
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX
XX RESULT 1338
XX AAQ75606/c
XX ID AAQ75606 standard; DNA; 20 BP.
XX
XX AC AAQ75606;
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 3 C; 0 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX
XX RESULT 1339
XX AAQ75603/c
XX ID AAQ75603 standard; DNA; 20 BP.
XX
XX AC AAQ75603;
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX
XX RESULT 1340
XX AAQ75571/c
XX ID AAQ75571 standard; DNA; 20 BP.
XX
XX

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AC  AAQ75571;
XX
DT  04-AUG-1995 (first entry)
XX
DE  Reverse transcription primer used in cDNA analysis technique.
XX
DE  Analysis; gene expression; reverse transcription; primer; cDNA;
XX  aggregate; restriction enzyme; ss.
XX
OS  Synthetic.
XX
PN  JP06303997-A.
XX
XX  01-NOV-1994.
PD
PF  16-APR-1993; 93JP-00112515.
XX
PR  16-APR-1993; 93JP-00112515.
XX
PA  (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR  WPI; 1995-018287/03.
XX
PT  Analysis of cDNA and gene expression - by amplification of mRNA followed
PT  by digestion with restriction enzymes.
XX
PS  Disclosure; Page 5; 11pp; Japanese.
XX
CC  A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC  double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC  labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC  and using the aggregate of mRNAs as the template for each reverse
CC  transcription primer; (b) digesting each of the prepared aggregates of
CC  the double-stranded cDNAs with restriction enzyme and; (c)
CC  electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC  method can be used to analyse gene expression rapidly and easily
XX
SQ  Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy  2709 AAAAAAAAAAAAAAAAAA 2725
Db  17 AAAAAAAAAAAAAAAAAA 1

RESULT 1341
ABQ79871/c
ID  ABQ79871 standard; DNA; 20 BP.
XX
AC  ABQ79871;
XX
DT  23-DEC-2002 (first entry)
XX
DE  Nucleotide sequence of a PCR primer #1.
XX
XX  Polymerase chain reaction; thermal cycle; immobilisation;
XX  Genetic engineering; PCR; primer; ss.
XX
OS  Synthetic.
XX
PN  JP2002191369-A.
XX
XX  09-JUL-2002.
PD
PF  27-DEC-2000; 2000JP-00399573.
XX
PR  27-DEC-2000; 2000JP-00399573.
XX
PA  (TOJO) TOYO KOHAN CO LTD.
PA  (TAKA) TAKAHASHI K.

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XX  WPI; 2002-630904/68.
XX
DT  Carrying out a thermal cycle of polymerase chain reaction (PCR) by using
XX  a substrate on which a DNA is immobilized used in medical, biochemical,
XX  molecular biological and gene engineering fields.
XX
PS  Example; Page 9; 13pp; Japanese.
XX
CC  The invention relates to performing a thermal cycle of PCR by using a
XX  substrate on which a deoxyribonucleic acid (DNA) is immobilized. The
XX  method is useful in the medical, biochemical, molecular biological and
XX  genetic engineering fields. Sequences ABQ79871-881 represent PCR primers
XX  used in the method of the invention
XX
SQ  Sequence 20 BP; 3 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy  2709 AAAAAAAAAAAAAAAAAA 2725
Db  20 AAAAAAAAAAAAAAAAAA 4

RESULT 1342
ABA05917/c
ID  ABA05917 standard; DNA; 20 BP.
XX
AC  ABA05917;
XX
DT  05-MAR-2002 (first entry)
XX
DE  Hepatitis B virus diagnostic PCR primer SEQ ID NO 7.
XX
XX  Hepatitis B virus; HBV; infection; hepatocellular carcinoma; diagnosis;
XX  PCR primer; ss.
XX
OS  Hepatitis B virus.
XX
XX  EP1152063-A1.
XX
PD  07-NOV-2001.
XX
PF  03-MAY-2000; 2000EP-00109436.
XX
XX  03-MAY-2000; 2000EP-00109436.
XX  (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
XX
PI  Schroeder KH, Koike K;
XX
DR  WPI; 2002-068256/10.
XX
DT  Diagnosing hepatitis B virus (HBV) infection stages and determining the
XX  risk for hepatocellular carcinoma, comprises identifying full length HBV
XX  transcripts and truncated HBV transcripts in a serum sample.
XX
PS  Example 1; Page 6; 25pp; English.
XX
CC  The invention relates to diagnosis of hepatitis B virus (HBV) infection
XX  stages comprising identification of full length HBV transcripts (I) and
XX  truncated HBV transcripts (II) in a serum sample, where the ratio of I:II
XX  is indicative of a particular infection stage. The method is useful for
XX  diagnosing HBV infection stages and determining the risk for developing
XX  hepatocellular carcinoma. The present sequence is that of a HBV
XX  diagnostic PCR primer, useful for the invention
XX
SQ  Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;

```

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
DB 17 CTAATAAAAAAAAAAAAA 1

RESULT 1343
ABZ89896
ID ABZ89896 standard; DNA; 20 BP.
XX
AC ABZ89896;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 5138; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 4 AAAAAAAAAAAAAAAAAA 20

RESULT 1344
ABZ89703
ID ABZ89703 standard; DNA; 20 BP.
XX
AC ABZ89703;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4945; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAA 2724
 Db 4 TAAAAAAAAAAAAAAAAA 20

RESULT 1345
 ABZ89719/C
 ID ABZ89719 standard; DNA; 20 BP.
 XX AC ABZ89719;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human oligonucleotide sequence.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 XX PN WO200285308-A2.
 XX PD 31-OCT-2002.
 XX PF 23-APR-2002; 2002WO-US013135.
 XX PR 24-APR-2001; 2001US-0286137P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX PS Disclosure; SEQ ID NO 4961; 872pp; English.
 XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
 Db 19 AAAAAAAAAAAAAAAAAA 3

RESULT 1346
 ABZ89014
 ID ABZ89014 standard; DNA; 20 BP.
 XX AC ABZ89014;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human oligonucleotide sequence.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 XX PN WO200285308-A2.
 XX PD 31-OCT-2002.
 XX PF 23-APR-2002; 2002WO-US013135.
 XX PR 24-APR-2001; 2001US-0286137P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX PS Disclosure; SEQ ID NO 4256; 872pp; English.
 XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
 DB 4 CTAATAAAAAAAAAAAAA 20

RESULT 1347
 ABD25949/C
 ID ABD25949 standard; DNA; 20 BP.
 AC ABD25949;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX AA96703-derived oligonucleotide SEQ ID 4961.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4961; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 19 AAAAAAAAAAAAAAAAAA 3

RESULT 1348
 ABD25244
 ID ABD25244 standard; DNA; 20 BP.
 AC ABD25244;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX AI051839-derived oligonucleotide SEQ ID 4256.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4256; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAA 2723
 DB 4 CTAATAAAAAAAAAAAAAA 20
 RESULT 1349
 ABD26126
 ID ABD26126 standard; DNA; 20 BP.
 AC ABD26126;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 DE AA463249-derived oligonucleotide SEQ ID 5138.
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX W0200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 XX oligonucleotide containing less percentage of adenosine, targeted to
 XX nucleic acids associated with lung airway or lung dysfunction, and
 XX bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 5138; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 4 AAAAAAAAAAAAAAAAAA 20
 RESULT 1350
 ADH67409/c
 ID ADH67409 standard; DNA; 20 BP.
 XX
 XX ADH67409;
 AC
 XX 25-MAR-2004 (first entry)
 DT
 XX
 XX Human glucocorticoid receptor-specific antisense oligonucleotide #4243.
 DE
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.
 XX
 XX W02003099215-A2.
 XX
 XX 04-DEC-2003.
 XX
 XX 20-MAY-2003; 2003WO-US016084.
 XX
 XX 20-MAY-2002; 2002US-0381857P.
 XX
 XX (PHAA) PHARMACIA CORP.
 XX
 XX Crosby SD, Nalseth AE;
 XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4243; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: the present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 20 AAAAAAAAAAAAAAAAAA 4

RESULT 1351
ADK75123/C
ID ADK75123 standard; DNA; 20 BP.
XX
AC ADK75123;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2457.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Robert's SL;
XX
DR WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 2457; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1352
ADK74838/C
ID ADK74838 standard; DNA; 20 BP.
XX
AC ADK74838;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2172.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Robert's SL;
XX
DR WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 2172; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;

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Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 20 AAAAAAAAAAAAAAAAAA 4

RESULT 1353
AAQ75670/c
ID AAQ75670 standard; DNA; 21 BP.
XX
AC AAQ75670;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1355
AAQ75661/c
ID AAQ75661 standard; DNA; 21 BP.
XX
AC AAQ75661;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1354
AAQ75795/c
ID AAQ75795 standard; DNA; 21 BP.
XX
AC AAQ75795;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX

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OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1355
AAQ75661/c
ID AAQ75661 standard; DNA; 21 BP.
XX
AC AAQ75661;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX

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CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1356
AAQ75669/c
ID AAQ75669 standard; DNA; 21 BP.
XX
AC AAQ75669;
XX
AC (first entry)
XX
04-AUG-1995 (first entry)
XX
Reverse transcription primer used in cDNA analysis technique.
XX
Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1357
AAQ75798/c
ID AAQ75798 standard; DNA; 21 BP.

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XX AAQ75798;
AC
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 4 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1358
AAQ75668/c
ID AAQ75668 standard; DNA; 21 BP.
XX
AC AAQ75668;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

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XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 7; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1359
XX AAQ75794/c
XX ID AAQ75794 standard; DNA; 21 BP.
XX
XX AC AAQ75794;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1361
XX AAQ75667/c
XX ID AAQ75667 standard; DNA; 21 BP.
XX
XX AC AAQ75667;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1361
XX AAQ75667/c
XX ID AAQ75667 standard; DNA; 21 BP.
XX
XX AC AAQ75667;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 7; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1360
XX AAQ75660/c
XX ID AAQ75660 standard; DNA; 21 BP.
XX
XX AC AAQ75660;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1361
XX AAQ75667/c
XX ID AAQ75667 standard; DNA; 21 BP.
XX
XX AC AAQ75667;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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XX JP06303997-A.
XX
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1362
XX AAQ75786/c
XX ID AAQ75786 standard; DNA; 21 BP.
XX
XX AC AAQ75786;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1362
XX AAQ75786/c
XX ID AAQ75786 standard; DNA; 21 BP.
XX
XX AC AAQ75786;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1363
XX AAQ75788/c
XX ID AAQ75788 standard; DNA; 21 BP.
XX
XX AC AAQ75788;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX DB 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1364
XX AAQ75791/c
XX ID AAQ75791 standard; DNA; 21 BP.
XX
XX

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AC AAQ75791;
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
OS Synthetic.
PN JP06303997-A.
XX 01-NOV-1994.
PD 16-APR-1993; 93JP-00112515.
PF 16-APR-1993; 93JP-00112515.
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1365
AAQ75655/c
ID AAQ75655 standard; DNA; 21 BP.
XX AC AAQ75655;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1365
AAQ75655/c
ID AAQ75655 standard; DNA; 21 BP.
XX AC AAQ75655;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DR WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1366
AAQ75663/c
ID AAQ75663 standard; DNA; 21 BP.
XX AC AAQ75663;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 6; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1367
AAQ75796/c
ID      AAQ75796 standard; DNA; 21 BP.
XX
AC      AAQ75796;
XX
DT      04-AUG-1995 (first entry)
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      Synthetic.
XX      JP06303997-A.
XX      01-NOV-1994.
XX      16-APR-1993; 93JP-00112515.
XX      16-APR-1993; 93JP-00112515.
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX      WPI; 1995-018287/03.
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
XX      by digestion with restriction enzymes.
XX      Disclosure; Page 9; 11pp; Japanese.
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX      Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;
XX      Query Match 0.6%; Score 17; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX      Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1369
AAQ75790/c
ID      AAQ75790 standard; DNA; 21 BP.
XX
AC      AAQ75790;
XX
DT      04-AUG-1995 (first entry)
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      Synthetic.
XX      JP06303997-A.
XX      01-NOV-1994.
XX      16-APR-1993; 93JP-00112515.
XX      16-APR-1993; 93JP-00112515.
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX      WPI; 1995-018287/03.
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
XX      by digestion with restriction enzymes.
XX      Disclosure; Page 9; 11pp; Japanese.
XX      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX      Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;
XX      Query Match 0.6%; Score 17; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX      Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1368
AAQ75797/c
ID      AAQ75797 standard; DNA; 21 BP.
XX
AC      AAQ75797;
XX
DT      04-AUG-1995 (first entry)
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      Synthetic.
XX

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1370
AAQ75656/c
ID AAQ75656 standard; DNA; 21 BP.
XX
AC AAQ75656;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1371
AAQ75784/c
ID AAQ75784 standard; DNA; 21 BP.
XX
AC AAQ75784;

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XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1372
AAQ75666/c
ID AAQ75666 standard; DNA; 21 BP.
XX
AC AAQ75666;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.

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XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1373
AAQ75658/c
ID AAQ75658 standard; DNA; 21 BP.
XX
AC AAQ75658;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1375
AAQ75783/c
ID AAQ75783 standard; DNA; 21 BP.
XX
AC AAQ75783;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1374
AAQ75789/c
ID AAQ75789 standard; DNA; 21 BP.
XX
AC AAQ75789;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1375
AAQ75783/c
ID AAQ75783 standard; DNA; 21 BP.
XX
AC AAQ75783;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.

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XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1376
ADW84561/c
ID ADW84561 standard; DNA; 21 BP.
XX AC ADW84561;
XX DT 07-APR-2005 (first entry)
XX DE MAP3K9 marker amplification reverse primer #1057.
XX KW mixed lineage kinase; MLK; asthma; at-risk haplotype; MAP3K9;
XX KW antiaethmatic; respiratory-gen.; antiinflammatory; antirheumatic;
XX KW antiarthritic; antipsoriatic; neuroprotective; gastrointestinal-gen.;
XX KW respiratory disease; chronic obstructive pulmonary disease;
XX KW chronic bronchitis; inflammation; ss; primer; PCR.
XX OS Unidentified.
XX PN WO2005007144-A2.
XX PD 27-JAN-2005.
XX PF 14-JUL-2004; 2004WO-US022446.
XX PR 14-JUL-2003; 2003US-0480702P.
XX PR 05-APR-2004; 2004US-0559611P.
XX PA (DECO-) DECODE GENETICS EHF.
XX PI Hakonarson H, Gurney ME, Halapi E;
XX DR WPI; 2005-122681/13.
XX PT Use of mixed lineage kinase family kinase inhibitor in the manufacture of
XX PT a medicament for treatment of asthma associated at-risk haplotype for
XX PT asthma, at-risk haplotype in MAP3K9 gene or increased MLK1 protein
XX PT expression or activity.

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XX Disclosure; Fig 12; 640pp; English.
XX PS The invention relates to the novel use of a mixed lineage kinase (MLK)
XX CC family kinase inhibitor for treating asthma. Where the asthma is
XX CC associated with a risk factor selected from an at-risk haplotype for
XX CC asthma, at-risk haplotype in MAP3K9 gene, polymorphism in MAP3K9 nucleic
XX CC acid, dysregulation of MAP3K9 mRNA expression, dysregulation of a MAP3K9
XX CC mRNA isoform, and/or increased MLK1 protein expression. The invention
XX CC further comprises: a method for the diagnosis or identification of
XX CC susceptibility to asthma; a method for the use of a first nucleic acid
XX CC molecule for diagnosing asthma or susceptibility to asthma in a sample; a
XX CC method for assaying the presence of a first nucleic acid molecule in a
XX CC sample; a method for assessing the response to treatment with an MLK
XX CC family kinase nucleic acid inhibitor in a target population or in an
XX CC individual with an at-risk haplotype for asthma, at-risk haplotype in the
XX CC MAP3K9 gene, polymorphism in the MAP3K9 nucleic acid, dysregulation of
XX CC MAP3K9 mRNA expression, dysregulation of MAP3K9 mRNA isoform, increased
XX CC MLK1 protein expression, increased MLK1 biochemical activity or increased
XX CC MLK1 protein isoform expression; a method for assessing the response to
XX CC treatment with an MLK1 inhibitor in a target population including an
XX CC individual with an at-risk haplotype for asthma as above; a kit for
XX CC assaying a sample for the presence or absence of at least one haplotype
XX CC comprising 2 or more alleles associated with asthma comprising: at least
XX CC one nucleic acid capable of detecting the presence or absence of at least
XX CC one specific allele; a reagent kit for assaying the presence of at least
XX CC one haplotype comprising 2 or more alleles comprising: at least one
XX CC labeled nucleic acid capable of detecting at least one specific allele of
XX CC the haplotype, and reagents for detection of the label, and a reagent kit
XX CC for assaying a sample for the presence of at least one haplotype
XX CC comprising 2 or more alleles comprising: at least one nucleic acid
XX CC complementary to at least one nucleotide sequence that is at least partially
XX CC acting as a primer for a primer extension reaction and capable of
XX CC detecting 2 or more specific alleles of the haplotype. The MLK family
XX CC kinase inhibitor has the following activities: antiaethmatic, respiratory
XX CC -gen., antiinflammatory, antirheumatic, antiarthritic, antipsoriatic,
XX CC neuroprotective, and gastrointestinal-gen. The MLK family kinase
XX CC inhibitor is useful for the treatment of asthma associated with a risk
XX CC factor selected from at-risk haplotype for asthma, at-risk haplotype in
XX CC MAP3K9 gene, polymorphism in MAP3K9 nucleic acid, dysregulation of MAP3K9
XX CC mRNA expression, dysregulation of MAP3K9 mRNA isoform, increased MLK1
XX CC protein expression, increased MLK1 biochemical activity and/or increased
XX CC MLK1 protein isoform expression; and in diagnosis or identification of
XX CC susceptibility to asthma. The inhibitor is also useful for the treatment
XX CC of other respiratory diseases associated with MAP3K9 or other members of
XX CC the JNK pathway such as chronic obstructive pulmonary disease, chronic
XX CC bronchitis and other inflammatory diseases such as rheumatoid arthritis,
XX CC psoriasis, multiple sclerosis and inflammatory bowel disease. This
XX CC polynucleotide sequence represents a reverse primer which is used in
XX CC amplifying a marker of the MAP3K9 kinase, where MAP3K9 is a part of
XX CC Mitogen-Activated Protein Kinase (MAPK) signal transduction pathways, of
XX CC the invention.
XX SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1146 AGAGGATCATGCTGTTTC 1162
Db 17 AGAGGATCATGCTGTTTC 1

RESULT 1377
AAT38295
ID AAT38295 standard; DNA; 20 BP.
XX AC AAT38295;
XX DT 29-MAY-1997 (first entry)
XX PT
XX

```

DE Specific primer for unique P. brasiliensis genomic DNA sequence.
 XX primer; PCR; polymerase chain reaction; amplify; unique;
 KW Paracoccidioides brasiliensis; rat beta-actin gene; target; detection;
 KW monitor treatment; contamination; ss.
 XX Synthetic.
 OS
 XX WO9629432-A1.
 XX
 XX PD 26-SEP-1996.
 XX
 XX PF 21-MAR-1996; 96WO-US003743.
 XX
 XX PR 22-MAR-1995; 95US-00408527.
 XX (UYBO-) UNIV BOSTON.
 PA
 XX Sugar AM, Goldani LZ;
 XX
 XX WPI; 1996-443205/44.
 DR
 XX Detecting infection or contamination by Paracoccidioides - using specific
 PT primers for nucleic acid amplification.
 PT
 XX Claim 16; Page 27; 39pp; English.
 PS
 XX AAT38294-303 are primers specific for an unique Paracoccidioides
 CC brasiliensis sequence. The unique sequence is contained in a 110 bp
 CC fragment (AAT38293) which includes 48 nucleotides of rat beta-actin
 CC primer sequence and 62 bp of unique P. brasiliensis sequence. The unique
 CC sequence can be used as a target for detection of Paracoccidioides
 CC infection. The specific primers are used to detect P. brasiliensis
 CC infection in mammals (and to monitor treatment) or contamination of food,
 CC water, soil, manufactured products (e.g. pharmaceuticals) or biomass. The
 CC method allows early (including pre-natal) diagnosis, and since samples
 CC can be sterilised is safe to perform
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2571 GAGCTAGGAGAGCTCTACCC 2590
 Db 1 GTGCTAGGAGAGCTCTCCC 20
 RESULT 1378
 AAZ04740/C
 ID AAZ04740 standard; DNA; 20 BP.
 XX
 XX AC AAZ04740;
 XX
 XX DT 07-OCT-1999 (first entry)
 XX
 XX DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
 XX
 XX OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 XX WO9928475-A2.
 XX
 XX PD 10-JUN-1999.
 XX
 XX PF 27-NOV-1998; 98WO-IB001939.
 XX

PR 28-NOV-1997; 97ER-00015041.
 PR 17-DEC-1997; 97ER-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX (GEST) GENSET.
 PA
 XX Griffais R;
 XX
 XX WPI; 1999-371125/31.
 DR
 XX Genome sequence of Chlamydia trachomatis.
 XX
 XX PS Disclosure; Page 1713; 1755pp; English.
 XX
 CC PCR primers AAZ01426-206209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;
 CC epididymitis; cervicitis; salpingitis; perihhepatitis; bartholinitis;
 CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2046 CTATCGTTGAGAGCTTCGC 2065
 Db 20 CTGTTGTTGAGAGCTTCGC 1
 RESULT 1379
 AAS05713/C
 ID AAS05713 standard; DNA; 20 BP.
 XX
 XX AC AAS05713;
 XX
 XX DT 07-SEP-2001 (first entry)
 XX
 XX DE Polypyrimidine Crick strand oligonucleotide.
 XX
 KW reverse phase triplex forming oligonucleotide; RP-TFO;
 KW protected nucleic acid sequence; PNAS; single nucleotide polymorphism;
 KW SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.
 XX
 XX OS Synthetic.
 XX
 XX PN WO200132929-A1.
 XX
 XX PD 10-MAY-2001.
 XX
 XX PF 03-NOV-2000; 2000WO-US030534.
 XX
 XX PR 03-NOV-1999; 99US-0163356P.
 PR 03-NOV-1999; 99US-0163416P.
 PR 21-DEC-1999; 99US-0171348P.
 PR 07-JUL-2000; 2000US-0216579P.
 XX
 XX (CYGB-) CYGENE INC.
 PA (OSTE/) OSTE C C.
 PA
 XX Oste CC, Ramberg ER;
 XX
 XX WPI; 2001-343488/36.
 XX
 XX PT Analyzing target nucleic acid sequences, useful for population genetics,

PT drug development and diagnosing cancer, comprises hybridizing triple
 XX forming oligonucleotide and probe to target sequence.

PS Example 2; Page 66; 141pp; English.

XX The sequence is a polypyrimidine oligonucleotide for binding a second
 CC reverse phase triplex forming oligonucleotide, RP-TFO, (3' to the SNP) to
 CC the target SNP used to analyse Factor V Leiden SNP using the method of
 CC the invention. The invention relates to analysing target nucleic acid
 CC sequences comprising restricting isolated DNA, hybridising at least one
 CC triplex forming oligonucleotide (TFO), adding a 3' to 5' exonuclease to
 CC form a protected nucleic acid sequence (PNAS) tail structure, hybridising
 CC the captured structure with a single nucleotide polymorphisms (SNP)
 CC identification probe and determining the SNP score. The methods can be
 CC used for analysing target nucleic acid sequences, especially genomic DNA
 CC sequences, to determine if they contain SNPs or short tandem repeats
 CC (STRs). The methods can be used to detect SNPs for use in population
 CC genetics, drug development, forensics, cancer, genetic disease research,
 CC genomic analysis, diagnostics and therapeutics in humans, plants and
 CC animals

XX SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AATAAGAAAAAAAAAAAAAAAAA 1

RESULT 1380

AAF83959/c

ID AAF83959 standard; DNA; 20 BP.

XX AC AAF83959;

XX DT 06-AUG-2001 (first entry)

XX DE BAP28 gene fragment amplifying primer BAP28polyTcourt.

XX BAP28; prostate; tumour; cancer; diagnostic; genetic analysis; PCTA-1;

XX KW PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200100669-A2.

XX PD 04-JAN-2001.

XX PF 23-JUN-2000; 2000WO-IB001183.

XX PR 25-JUN-1999; 99US-0141323P.

XX PR 18-JAN-2000; 2000US-0176880P.

XX (GEST) GENSET.

XX PI Barry C, Bougueleret L, Chumakov I, Cohen-Akenine A;

XX DR WPI; 2001-367032/38.

XX PT New BAP28 polynucleotides and polypeptides overexpressed in prostate

XX cancer cells for diagnosing prostate tumors, e.g. by hybridization or

XX polymerase chain reaction assays.

XX PS Example; Page 347; 349pp; English.

XX The invention is directed to BAP28 polypeptides, BAP28 polynucleotide
 CC sequences and regulatory region located at the 3' and 5' ends of the
 CC BAP28 coding region. The BAP28 polypeptides can be expressed by standard
 CC recombinant methodology. BAP28 polynucleotides and polypeptides have been
 CC found to be over expressed in prostate tumour cells, therefore levels of

CC BAP28 expression and/or activity may be assayed (e.g. by polymerase chain
 CC reaction (PCR)) to diagnose patient suffering from or susceptible to
 CC prostate cancer. Antibodies specific for the BAP28 polypeptides are
 CC useful as diagnostic reagents. Biallelic markers of the BAP28 gene are
 CC useful in genetic analysis. Sequences AAF83934-963 represent primers for
 CC the BAP28 gene and PCTA-1 gene (the coding strand of PCTA-1 gene is on
 CC the opposite of the coding strand of BAP28)

XX SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2703 TGTACTAAAAAAAAAAAAA 2722

Db 20 TATACAAAAAAAAAAAAA 1

RESULT 1381

ABT07486

ID ABT07486 standard; DNA; 20 BP.

XX AC ABT07486;

XX DT 14-NOV-2002 (first entry)

XX DE Rat protein phosphatase 2 oligo inhibitor SEQ ID No 100.

XX KW Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;
 KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;
 KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.

XX OS Rattus norvegicus.

XX PN WO200264737-A2.

XX PD 22-AUG-2002.

XX PF 31-JAN-2002; 2002WO-US002805.

XX PR 09-FEB-2001; 2001US-00780045.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Monia BP, Wyatt JR;

XX DR WPI; 2002-657588/70.

XX PT New antisense oligonucleotides targeted to nucleic acid encoding Protein
 PT Phosphatase 2 catalytic subunit beta, useful for treating diseases
 PT related to Protein Phosphatase 2 catalytic subunit beta expression, such
 PT as cancer.

XX Example 16; Page 98; 137pp; English.

XX The invention relates to a novel compound 8-50 nucleotides in length
 CC targeted to a nucleic acid molecule encoding a protein phosphatase 2
 CC catalytic beta subunit, where the compound specifically hybridises with
 CC and inhibits the expression of protein phosphatase 2 catalytic beta
 CC subunits, or specifically hybridises with at least an 8-nucleotide
 CC portion of an active site on a nucleic acid molecule encoding a protein
 CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful
 CC for modulating the expression of protein phosphatase 2 catalytic beta
 CC subunits and for treating diseases or conditions associated with
 CC expression of protein phosphatase 2 catalytic beta subunits, e.g.
 CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,
 CC particularly cancer. The antisense compounds are also useful for
 CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
 CC infection, inflammation or tumour formation, as research reagents and
 CC kits, and in distinguishing between functions of various members of a
 CC biological pathway. This polynucleotide sequence represents an
 CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta

CC subunit mRNA levels of the invention. NOTE: This oligonucleotide contains
CC phosphorothioate residues and has 2'- MOE wings with a deoxy gap
XX
SQ Sequence 20 BP; 2 A; 10 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 405 CCGCGGCGCGCGCGCGGCC 424
Db 1 CAGCGGCGAGCGCGCGGCC 20

RESULT 1382
ABZ85669/c
ID ABZ85669 standard; DNA; 20 BP.
XX
AC ABZ85669;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 911; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cyostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AGAAAAAAGAAAAA 1
RESULT 1383
ABZ89178
ID ABZ89178 standard; DNA; 20 BP.
XX
AC ABZ89178;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4420; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cyostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2702 TTGTACTAAAAA 2721
 |||||
 Db 1 TTGTTTAAAAA 20

RESULT 1384
 ABZ85535
 ID ABZ85535 standard; DNA; 20 BP.
 XX
 AC ABZ85535;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cycostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 FN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 777; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end and genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cycostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAA 2728
 |||||
 Db 1 AAAAAAGAAAGAAAAA 20

RESULT 1385
 ABD25408
 ID ABD25408 standard; DNA; 20 BP.
 XX
 AC ABD25408;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A112807-derived oligonucleotide SEQ ID 4420.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hyperextension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4420; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a
 CC analgesic, hypotensive, immunosuppressive and cycostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 SQ Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2702 TTGTACTAAAAA 2721
 ||||| ||||| ||||| |||||
 Db 1 TTGTTTAAAAA 20

RESULT 1386
 ABD21765
 ID ABD21765 standard; DNA; 20 BP.
 AC ABD21765;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX Human stanniocalcin-derived oligo SEQ ID 777.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytotstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 OS
 PN WO200285309-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 777; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
 ||||| ||||| ||||| |||||
 Db 1 AAAAAAAGAAAGAAAAA 20

RESULT 1387
 ABD21899/c
 ID ABD21899 standard; DNA; 20 BP.
 XX ABD21899;
 AC ABD21899;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX Human stanniocalcin-derived oligo SEQ ID 911.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytotstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 911; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine, (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AGAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1388
 ADH70655
 ID ADH70655 standard; DNA; 20 BP.
 XX
 AC ADH70655;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #445.
 XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.

OS Homo sapiens.
 XX
 PN US2002150891-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX
 PI Hood LE, Rowen L;
 XX
 DR WPI; 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 849; 164pp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetarNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases,
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases,
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 1389
 ADL01298
 ID ADL01298 standard; DNA; 20 BP.
 XX
 AC ADL01298;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #831.
 XX
 KW Human; VEGF co-regulated chemokine-1; VCC-1;
 KW vascular endothelial growth factor; ss; antisense compound;
 KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; antisense oligonucleotide; diabetes;
 KW immunological disorder; cardiovascular disorder; neurological disorder;
 KW ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;

KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
 KW fibrosis; myocardial infarction; wound healing; bone fracture;
 KW cartilage damage; tissue regeneration; organ regeneration;
 KW periodontal disease; gut regeneration; atrial fibrillation.
 OS Homo sapiens.
 XX WO2004016224-A2.
 XX 26-FEB-2004.
 XX 19-AUG-2003; 2003WO-US025891.
 XX 19-AUG-2002; 2002US-0404484P.
 XX (PHAA) PHARMACIA CORP.
 XX Weinstein EJ;
 XX WPI; 2004-192065/18.
 XX New antisense compounds targeted to a nucleic acid molecule encoding
 PT vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
 PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
 PT neurologic disorder.
 XX Claim 4; SEQ ID NO 831; 336pp; English.
 XX The invention relates to an antisense compound targeted to a nucleic acid
 CC molecule encoding human vascular endothelial growth factor (VEGF) co-
 CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
 CC inhibits the expression of VCC-1. The invention also relates to a
 CC composition comprising the antisense compound, a method of inhibiting the
 CC expression of VCC-1 in cells or tissues comprising contacting the cells
 CC or tissues with the antisense compound and a method of treating a human
 CC having a disease or condition associated with VCC-1 comprising
 CC administering the antisense compound to an animal to inhibit expression
 CC of VCC-1. The antisense oligonucleotide comprises at least one modified
 CC internucleoside linkage, preferably a phosphorothioate linkage. It also
 CC comprises at least one modified sugar moiety, preferably a 2'-O-
 CC methoxyethyl sugar moiety, and at least one modified nucleobase,
 CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
 CC is a chimeric oligonucleotide. The antisense compound is useful for
 CC treating a disease or condition associated with VCC-1, such as diabetes,
 CC an immunological disorder, a cardiovascular disorder, a neurological
 CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic
 CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
 CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
 CC antisense oligonucleotides may also be used for wound healing, for
 CC healing of bone fractures and cartilage damage, for regeneration of
 CC tissues or organs, for treating periodontal diseases, for gut protection
 CC or regeneration, for treatment of lung or liver fibrosis or for
 CC management of atrial fibrillation. This sequence represents an antisense
 CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
 CC the invention.
 XX Sequence 20 BP; 9 A; 1 C; 2 G; 8 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 944 GTGAATTTTAAATAATTTA 963
 ||||| ||||| ||||| ||||| |||||
 Db 1 GTGCATTTTAAATAATTTA 20
 RESULT 1390
 ADM14429/c
 ID ADM14429 standard; DNA; 20 BP.
 XX
 AC ADM14429;
 XX

DT 01-JUL-2004 (first entry)
 XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:616.
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FH /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 PS Claim 4; SEQ ID NO 616; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiac, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX Sequence 20 BP; 1 A; 1 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2724
DB 20 TCCCAAAAAA 1

RESULT 1391

ADO81058/c

ID ADO81058 standard; DNA; 20 BP.

XX

AC ADO81058;

XX

DT 29-JUL-2004 (first entry)

XX

DE

XX

KW gene typing; polymorphic microsatellite loci; PML;

KW disease predisposition; microsatellite marker; prion disease;

KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;

KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;

KW microsatellite; PCR; primer; ss.

XX

OS Bos taurus.

XX

FN DE10236711-A1.

XX

PD 26-FEB-2004.

XX

XX

PF 09-AUG-2002; 2002DE-01036711.

XX

PR 09-AUG-2002; 2002DE-01036711.

XX

XX (UYHO-) UNIV HOHENHEIM.

XX

PI Geldermann H, Preuss S, Han Y;

XX

DR WPI; 2004-215730/21.

XX

XX

PT Typing genes that contain polymorphic microsatellite loci, useful for

PT identifying predisposition to disease, by amplification and determining

PT length of amplicons.

XX

XX Example 3; Page 28; 64pp; German.

PS

XX

CC The invention describes a method of typing (M1) a gene (I) that has one

CC or more polymorphic microsatellite loci (PML). The method comprises: PCR

CC amplification of at least one DNA region of (I) that includes PML, using

CC as template a DNA sample containing at least one segment of (I); and

CC determining the length of the resulting amplicon(s). Also described are:

CC a method of determining (M2) microsatellite markers (MM) for

CC predisposition to a disease, associated with a gene that includes one or

CC more PML; and prediagnosis (M3) of diseases associated with gene that

CC include PML. The method is used to identify microsatellite markers, in a

CC disease-related gene, that are associated with a predisposition to

CC diseases and for prediagnosis of such diseases, especially prion diseases

CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and

CC metabolic diseases; also to type genes that encode milk proteins,

CC hormones or transcription factors. The method is simpler, quicker and

CC particularly less expensive than known methods based on sequencing. This

CC sequence represents a primer used to genotype a region of the cow prion

CC protein (Prp) comprising a polymorphic microsatellite locus.

XX

SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728

Db 20 AAAAGGAAAAA 1

RESULT 1392

ACL53467

ID ACL53467 standard; DNA; 21 BP.

XX

AC ACL53467;

XX

DT 24-MAR-2005 (first entry)

XX

DE TRPM4 target oligonucleotide, SEQ ID 14539.

XX

KW Cytostatic; Gene therapy; Vaccine; RNA Interference; cancer; ss.

XX

OS Homo sapiens.

XX

FN W02005001092-A2.

XX

PD 06-JAN-2005.

XX

XX

PF 19-MAY-2004; 2004WO-US015645.

XX

PR 20-MAY-2003; 2003US-0471729P.

XX

XX (AMHP) WYETH.

XX

PI Be X, Wei L, Slonim DK, Howes SH;

XX

DR WPI; 2005-075568/08.

XX

XX

PT Pharmaceutical composition comprising an agent capable of modulating an

PT expression level or protein activity of a gene, e.g. ABC4, or a T cell

PT activated by the polypeptide or antibody, and a carrier, useful for

PT treating cancer.

XX

PS Claim 3; SEQ ID NO 14539; 113pp; English.

XX

CC The present invention relates to a novel pharmaceutical composition

CC comprising: (a) an agent capable of modulating an expression level or

CC protein activity of a cancer-related transmembrane protein (CRTP) or gene

CC ; an antibody specific for a CRTP, or a T cell activated by a CRTP; and

CC (b) a carrier. The pharmaceutical composition may also comprise a

CC polynucleotide capable of inhibiting or decreasing the expression of the

CC CRTP by RNA interference or an antisense mechanism. The CRTPs of the

CC invention are selected from ABC4, C20orf103, CACNA1D, CDH6, CST, ENPP3,

CC FJL1856, GPR54, HAVCR1, SLC6A3, SLC30A4, TRG, and TRPM4. The

CC pharmaceutical composition is useful for treating cancer, e.g. colon

CC cancer, lung cancer, breast cancer, prostate cancer, liver cancer, kidney

CC cancer, stomach cancer, and esophageal cancer. The present sequence is a

CC target oligonucleotide from one such CRTP for which short interfering

CC RNAs (siRNA) were produced. Note: The sequence data for this patent did

CC not form part of the printed specification, but was obtained in

CC electronic format directly from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 21 BP; 1 A; 7 C; 6 G; 7 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16.8; DB 1; Length 21;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2121 ACCTGGAGGCTTGGCCTTG 2140

DB 2 ACCTGGAGGCTTGGCCTTG 21

RESULT 1393

ADZ11210/c

ID ADZ11210 standard; DNA; 21 BP.

XX

AC ADZ11210;

```

XX DT 16-JUN-2005 (first entry)
XX DE Human STAT3-specific antisense oligonucleotide - SEQ ID 401.
XX KW antisense oligonucleotide; antisense therapy; inflammation;
XX KW antiinflammatory; rheumatoid arthritis; antiarthritic; antirheumatic;
XX KW cancer; cytostatic; breast tumor; prostate tumor; head & neck tumor;
XX KW brain tumor; multiple myeloma; melanoma; leukemia; lymphoma; STAT3; ss;
XX KW phosphorothioate; 2'-O-methoxyethyl; 2'-MOE wing.
XX OS Homo sapiens.
XX PN US2005074879-A1.
XX PD 07-APR-2005.
XX PF 06-FEB-2004; 2004US-00773678.
XX PR 06-APR-2000; 2000WO-US009054.
XX PR 11-JAN-2001; 2001US-00758881.
XX PR 14-NOV-2003; 2003US-00711319.
XX PA (KARR/) KARRAS J G.
XX PI Karras JG;
XX PI WPI; 2005-272408/28.
XX DR
XX PT New antisense compound, useful for treating or preventing inflammatory
XX PT diseases (e.g. rheumatoid arthritis) and cancers (breast, prostate, head
XX PT and neck, and brain cancer, myelomas, melanomas, leukemias, and
XX PT lymphomas).
XX PS Example 22; SEQ ID NO 401; 149bp; English.
XX CC The invention comprises antisense oligonucleotides that are targeted to
XX CC nucleic acid molecules encoding human signal transducers and activators
XX CC of transcription 3 (STAT3). The antisense oligonucleotides of the
XX CC invention inhibit expression of human STAT3. The antisense
XX CC oligonucleotides of the invention are useful for treating and preventing
XX CC inflammatory diseases (e.g. rheumatoid arthritis) and cancers (e.g.
XX CC breast, prostate, head and neck, brain, myelomas, melanomas, leukemias,
XX CC and lymphomas). The present DNA sequence represents a human STAT3-
XX CC specific antisense oligonucleotide. NOTE: The present sequence has a
XX CC phosphorothioate backbone, 2'-MOE wings and a deoxy gap.
XX SQ Sequence 21 BP; 2 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2438 AAGAAGCAGGAGCTGCTGGA 2457
Db 21 AAGAAGCAGCAGATGCTGGA 2

RESULT 1394
AAQ30446/c
ID AAQ30446 standard; DNA; 18 BP.
XX AC AAQ30446;
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX OLIGOMER TNFR941 for forming triplex with HUMNFR target duplex.
XX Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
XX KW HPV; malignancy; hepatitis; inflammation; ss.
XX KW Synthetic.
OS

```

```

XX PH Key Location/Qualifiers
XX FT modified_base 5
XX FT /tag= a
XX FT /mod_base= m5c
XX FT modified_base 18
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX PN WO9209705-A1.
XX PD 11-JUN-1992.
XX PF 25-NOV-1991; 91WO-US008811.
XX PR 23-NOV-1990; 90US-00617907.
XX PR 18-JAN-1991; 91US-00643382.
XX PR 08-APR-1991; 91US-00683420.
XX PR 17-APR-1991; 91US-00686544.
XX PR 17-APR-1991; 91US-00686546.
XX PR 17-APR-1991; 91US-00686547.
XX PR 27-SEP-1991; 91US-00766733.
XX PA (GILE-) GILEAD SCI INC.
XX PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX PI WPI; 1992-217083/26.
XX DR
XX PT New oligomers contg. modified bases - which form a triplex with G-C
XX PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX PT herpes malignancy and inflammation.
XX PS Claim 12; Page 72; 77pp; English.
XX CC The synthetic oligomer is capable of forming a triplex at physiological
XX CC pH with a purine rich target sequence by coupling into the major groove
XX CC of the duplex. The specific target sequence of this oligomer is the human
XX CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
XX CC a purine rich sequence concd. on one strand of the duplex. The oligomer,
XX CC and others like it are useful in diagnosis and therapy of diseases
XX CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV,
XX CC hepatitis B, herpes, malignant tumours and inflammation. The triple
XX CC helices form under mild conditions thus assays may be carried out without
XX CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501
XX CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated
XX CC on 25-MAR-2003 to correct PD field.)
XX SQ Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2725
Db 18 TAAAAAATAAAAAAAGAAA 1

RESULT 1395
AAF75598/c
ID AAF75598 standard; DNA; 18 BP.
XX AC AAF75598;
XX 10-MAY-2001 (first entry)
XX DE Binary encoded sequence tag method anchored primer #3.
XX KW Binary encoded sequence tag; BEST; nucleic acid analysis;
XX KW gene expression; adaptor; PCR primer; ss.
XX OS

```

```

OS Synthetic.
PN WO200112855-A2.
XX
PD 22-FEB-2001.
XX
PF 11-AUG-2000; 2000WO-US022164.
XX
PR 13-AUG-1999; 99US-0148870P.
PR 06-APR-2000; 2000US-00544713.
XX
PA (UYVA ) UNIV YALE.
XX
PI Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX WPI; 2001-202878/20.
XX
PT Producing binary sequence tags, useful for analyzing nucleic acid
PT sequence tags, gene expression or gene-expression patterns, involves
PT generating nucleic acid fragments, which are mixed with offset adaptors
PT and adaptor-indexers.
XX
PS Disclosure; Page 101; 101pp; English.
XX
CC The present invention describes a method of producing binary sequence
CC tags from nucleic acid fragments in a sample, involving incubating the
CC sample with cleaving reagents, mixing offset adaptors with the sample,
CC incubating with more cleaving reagents and mixing the sample with adaptor
CC -indexers where the adaptors are coupled to binary sequence tags. The
CC method is useful in sequence analysis, including analysis and comparison
CC of gene expression, nucleic acid samples and genomes
XX
SQ Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
PS 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1
RESULT 1396
AAF75597/c
ID AAF75597 standard; DNA; 18 BP.
AC
AC AAF75597;
XX
DT 10-MAY-2001 (first entry)
DE Binary encoded sequence tag method anchored primer #2.
XX
KW Binary encoded sequence tag; BEST; nucleic acid analysis;
KW gene expression; adaptor; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO200112855-A2.
XX
PD 22-FEB-2001.
XX
PF 11-AUG-2000; 2000WO-US022164.
XX
PR 13-AUG-1999; 99US-0148870P.
PR 06-APR-2000; 2000US-00544713.
XX
PA (UYVA ) UNIV YALE.
XX
PI Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX WPI; 2001-202878/20.
XX

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PT Producing binary sequence tags, useful for analyzing nucleic acid
PT sequence tags, gene expression or gene-expression patterns, involves
PT generating nucleic acid fragments, which are mixed with offset adaptors
PT and adaptor-indexers.
XX
PS Disclosure; Page 100; 101pp; English.
XX
CC The present invention describes a method of producing binary sequence
CC tags from nucleic acid fragments in a sample, involving incubating the
CC sample with cleaving reagents, mixing offset adaptors with the sample,
CC incubating with more cleaving reagents and mixing the sample with adaptor
CC -indexers where the adaptors are coupled to binary sequence tags. The
CC method is useful in sequence analysis, including analysis and comparison
CC of gene expression, nucleic acid samples and genomes
XX
SQ Sequence 18 BP; 0 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAATAAAAAAAAA 2723
Db 18 ACTAAAAATAAAAAAAAA 1
RESULT 1397
ABK13935/c
ID ABK13935 standard; DNA; 18 BP.
XX
AC ABK13935;
XX
DT 21-MAY-2002 (first entry)
DE 5'-PCR primer used to produce single pattern characteristic by HaeII.
XX
KW Identification of transcribed gene; mRNA profile; gene expression;
KW cellular process; fingerprinting; susceptibility to external factor;
KW development; disease; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO200208461-A2.
XX
PD 31-JAN-2002.
XX
PF 23-JUL-2001; 2001WO-IB001539.
XX
PR 21-JUL-2000; 2000GB-00018016.
PR 21-JUL-2000; 2000US-0219925P.
XX
PA (GLOB-) GLOBAL GENOMICS AB.
XX
PI Linnarsson S, Ernfors P, Bauren G;
XX WPI; 2002-217065/27.
XX
PT Providing mRNA profile, by generating two independent patterns
PT characteristic of sample mRNA population, analyzing patterns, comparing
PT gene expression by cell types under varied conditions, and identifying
PT genes.
XX
PS Disclosure; Fig 1; 67pp; English.
XX
CC The present invention relates to a method for providing a profile of mRNA
CC molecules present in a sample. The method comprises generating two
CC independent patterns characteristic of the population of mRNA molecules
CC expressed in the sample and analysing the patterns using a combinatorial
CC algorithm, comparing gene expression by different or same cell types
CC under different conditions, and identifying genes having a role in
CC various cellular processes. The method is useful for the analysis and
CC identification of transcribed genes, and fingerprinting. The method can
CC be used to identify genes which play a role in determining various

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CC cellular processes, including susceptibility to external factors,
 CC development, and disease. The present sequence for a PCR primer is used
 CC in the production of a single pattern characteristic of a sample,
 CC employing a Type II restriction enzyme (i.e. HaeII) in the methods of the
 CC present invention

XX
 SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2724
 | ||||| ||||| ||||| |||||
 Db 18 CGAAAAAAGAAAAA 1

RESULT 1398
 ACF36339/C
 ID ACF36339 standard; DNA; 18 BP.
 XX AC ACF36339;
 XX DT 04-DEC-2003 (first entry)
 XX DE Nucleotide sequence of a double stranded product DNA fragment.

XX KW Gene variant identification; restriction enzyme; HaeII; ds.

XX OS Synthetic.

XX PN WO2003064689-A2.

XX PD 07-AUG-2003.

XX PF 28-JAN-2003; 2003WO-IB000255.

XX PR 29-JAN-2002; 2002US-0352245P.

XX PA (GLOB-) GLOBAL GENOMICS AB.

XX PI Lonnberg P, Oldin M, Linnarsson S, Ernfors P;

XX DR WPI; 2003-627619/59.

XX PT Determining polyadenylation sites within transcribed gene sequences
 PT present in a sample comprises assigning to gene fragments gene candidates
 PT within a database by comparing signals in the dataset with the database.

XX PS Example; Fig 2; 81pp; English.

XX CC The invention relates to determining the presence of and/or identifying a
 CC polyadenylation site within a sequence of a transcribed gene or variants
 CC present in a sample. The method involves assigning to gene fragments gene
 CC candidates within a database by comparing signals in the dataset with the
 CC database, the database comprising data representing mRNAs with known
 CC polyA sites and/or 'virtual genes' representing a possible
 CC polyadenylation site within an actual gene. The method is useful for
 CC determining the presence of and/or identifying a polyadenylation site or
 CC alternative polyadenylation sites within a sequence of a transcribed gene
 CC or sequences of transcribed gene variants present or potentially present
 CC in a sample, in identifying gene features, particularly in identifying
 CC differences between sequence variants that occur in a population of
 CC nucleic acid molecules, especially in identifying or discovering polyA
 CC site usage or determining polyA site usage in a nucleic acid sample, and
 CC gene variants arising from alternative polyA sites. The present sequence
 CC represents a double stranded product DNA fragment

XX SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2724
 | ||||| ||||| ||||| |||||
 Db 18 CGAAAAAAGAAAAA 1

RESULT 1399
 ACF36364/C
 ID ACF36364 standard; DNA; 18 BP.
 XX AC ACF36364;
 XX DT 04-DEC-2003 (first entry)
 XX DE Nucleotide sequence of a double stranded product DNA.

XX KW Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
 KW electrophoresis; type II restriction enzyme; HaeII; ds.

XX OS Synthetic.

XX PN WO2003064691-A2.

XX PD 07-AUG-2003.

XX PF 28-JAN-2003; 2003WO-IB000843.

XX PR 29-JAN-2002; 2002US-0352215P.

XX PA (GLOB-) GLOBAL GENOMICS AB.

XX PI Linnarsson S, Ernfors P, Bauren G, Metsis A, Pihlak A;
 PI Montellus A;

XX DR WPI; 2003-618365/58.

XX PT Producing a population of double-stranded product DNA molecules, useful
 PT for mRNA profiling, comprises amplification by nested polymerase chain
 PT reaction.

XX PS Example; Fig 1; 105pp; English.

XX CC The invention relates to producing a population of double-stranded
 CC product DNA molecules comprising amplification by a nested PCR method.
 CC The method is useful in profiling mRNA transcribed in a system under
 CC investigation. The oligonucleotides are used as size standards in
 CC electrophoresis, and as internal controls allowing for calculation of
 CC relative amounts of material present. The present sequence represents a
 CC double stranded product DNA, which aids in outlining an approach to
 CC production of a single pattern characteristic of a sample, employing a
 CC type II restriction enzyme (HaeII)

XX SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2724
 | ||||| ||||| ||||| |||||
 Db 18 CGAAAAAAGAAAAA 1

RESULT 1400
 ADE29541
 ID ADE29541 standard; RNA; 19 BP.

XX AC ADE29541;

XX DT 29-JAN-2004 (first entry)

XX DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:163.

XX

KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX
 XX WO2003072590-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-JAN-2003; 2003WO-US002510.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX WPI; 2003-689980/65.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 XX Example 3; SEQ ID NO 163; 164pp; English.
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antibacterial, antirheumatic,
 CC antiasthmatic, immunosuppressive, antiinflammatory,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 XX SQ Sequence 19 BP; 16 A; 1 C; 0 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.1e+03;
 Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2725
 Db 2 UCACAAAAAATAAAAAAAAAA 19
 RESULT 1401
 ADE29704/c
 ID ADE29704 standard; RNA; 19 BP.
 XX
 AC ADE29704;

XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:326.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX
 XX WO2003072590-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-JAN-2003; 2003WO-US002510.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 XX WPI; 2003-689980/65.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 XX Example 3; SEQ ID NO 326; 164pp; English.
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antibacterial, antirheumatic,
 CC antiasthmatic, immunosuppressive, antiinflammatory, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 XX SQ Sequence 19 BP; 2 A; 0 C; 1 G; 0 T; 16 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2725
 Db 18 TCACAAAAAATAAAAAAAAAA 1

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RESULT 1402
ADU64845/c
ID ADU64845 standard; RNA; 19 BP.
AC ADU64845;
XX
DT 27-JAN-2005 (first entry)
XX
DE Human MAP kinase 1/ ERK2 siRNA #326.
XX
KW RNA interference; mitogen activated protein kinase inhibitor;
KW inflammation; immunosuppressive; immune disorder; autoimmune disease;
KW allergy; antiallergic; cytostatic; neoplasm; cancer; ss; siRNA;
KW gene silencing; small interfering RNA; MAP kinase inhibitor.
XX
OS Homo sapiens.
XX
PN WO2004097020-A2.
XX
PD 11-NOV-2004.
XX
PF 23-APR-2004; 2004WO-US012517.
XX
PR 25-APR-2003; 2003US-00424339.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 14-JAN-2004; 2004US-00757803.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI Polisky B;
XX
WPI; 2005-012649/01.
XX
DR Novel short interfering nucleic acid molecule useful for inhibiting
PT mitogen activated protein kinase gene expression e.g., c-JUN associated
PT with diseases e.g., inflammatory disease or autoimmune disease.
XX
PS Disclosure; SEQ ID NO 326; 322pp; English.
XX
CC The invention relates to a chemically synthesized double stranded short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a c
CC -JUN RNA through RNA interference (RNAi), where one strand of the siNA
CC molecule comprises nucleotide sequence having sufficient complementarity
CC to the c-JUN RNA for the siNA molecule to direct cleavage of the c-JUN
CC RNA through RNA interference. (I) is useful for inhibiting mitogen
CC activated protein kinase gene (e.g., c-JUN, JNK1, JNK2, p38, ERK1 or
CC ERK2) expression associated with diseases e.g., inflammatory disease,
CC autoimmune disease, allergy, cancer. (I) exhibits improved RNA
CC interference activity and nuclease resistance. The present sequence
CC represents a human MAP kinase 1/ ERK2 siRNA.
XX
SQ Sequence 19 BP; 2 A; 0 C; 1 G; 0 T; 16 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAA 2725
Db 18 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1403
ADU64682
ID ADU64682 standard; RNA; 19 BP.
XX
AC ADU64682;
XX
DT 27-JAN-2005 (first entry)
XX

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```

XX Human MAP kinase 1/ ERK2 siRNA #163.
DE RNA interference; mitogen activated protein kinase inhibitor;
XX inflammation; immunosuppressive; immune disorder; autoimmune disease;
KW allergy; antiallergic; cytostatic; neoplasm; cancer; ss; siRNA;
KW gene silencing; small interfering RNA; MAP kinase inhibitor.
XX
OS Homo sapiens.
XX
PN WO2004097020-A2.
XX
PD 11-NOV-2004.
XX
PF 23-APR-2004; 2004WO-US012517.
XX
PR 25-APR-2003; 2003US-00424339.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 14-JAN-2004; 2004US-00757803.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI Polisky B;
XX
WPI; 2005-012649/01.
XX
DR Novel short interfering nucleic acid molecule useful for inhibiting
PT mitogen activated protein kinase gene expression e.g., c-JUN associated
PT with diseases e.g., inflammatory disease or autoimmune disease.
XX
PS Disclosure; SEQ ID NO 163; 322pp; English.
XX
CC The invention relates to a chemically synthesized double stranded short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a c
CC -JUN RNA through RNA interference (RNAi), where one strand of the siNA
CC molecule comprises nucleotide sequence having sufficient complementarity
CC to the c-JUN RNA for the siNA molecule to direct cleavage of the c-JUN
CC RNA through RNA interference. (I) is useful for inhibiting mitogen
CC activated protein kinase gene (e.g., c-JUN, JNK1, JNK2, p38, ERK1 or
CC ERK2) expression associated with diseases e.g., inflammatory disease,
CC autoimmune disease, allergy, cancer. (I) exhibits improved RNA
CC interference activity and nuclease resistance. The present sequence
CC represents a human MAP kinase 1/ ERK2 siRNA.
XX
SQ Sequence 19 BP; 16 A; 1 C; 0 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.1e+03;
Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAA 2725
Db 2 UCAAAAAAAAAAAAAAAAAA 19

RESULT 1404
ADZ00541/c
ID ADZ00541 standard; DNA; 19 BP.
XX
AC ADZ00541;
XX
DT 16-JUN-2005 (first entry)
XX
DE Human AdipoR1 reverse primer, primer2.
XX
ss; PCR; Cardiant; Dermatological; Gastrointestinal; Hemostatic;
KW Respiratory-Gen; Nootropic; Neuroprotective; Uropathic; Cytostatic;
KW Antiinflammatory; AdipoR1-inhibitor; AdipoR1-activator;
KW G protein coupled receptor; AdipoR1; primer.

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XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2005031346-A2.
XX XX 07-APR-2005.
XX PD
XX PF 16-SEP-2004; 2004WO-EP010384.
XX PF 27-SEP-2003; 2003EP-00021897.
XX PA (FARB ) BAYER HEALTHCARE AG.
XX XX
XX PI Golz S, Brueggemeier U, Geerts A;
XX DR WPI; 2005-254243/26.
XX XX
XX PT Screening for therapeutic agents useful for treating cardiovascular,
XX PT dermatological, respiratory or neurological diseases, cancer or
XX PT inflammation in a mammal comprises contacting a test compound with a
XX PT AdipoR1 polypeptide.
XX XX
XX PS Example 2; SEQ ID NO 4; 135pp; English.
XX XX
XX CC This sequence represents a primer which was used for relative
XX CC quantitation of the distribution of the G protein coupled receptor,
XX CC AdipoR1, mRNA in cells and tissues. The method of the invention for
XX CC screening for therapeutic agents useful for treating cardiovascular,
XX CC dermatological, gastroenterological, hematological, respiratory,
XX CC neurological or urological diseases, cancer or inflammation in a mammal
XX CC comprises contacting a test compound with an AdipoR1 polypeptide and
XX CC detecting binding of the test compound to the AdipoR1 polypeptide. A
XX CC further method is included for diagnosing any of the diseases cited above
XX CC in a mammal comprising determining the amount of an AdipoR1
XX CC polynucleotide in a sample taken from the mammal and determining the
XX CC amount of AdipoR1 polynucleotide in healthy and/or diseased mammals.
XX CC Regulators of AdipoR1 activity are useful for regulating AdipoR1 activity
XX CC in a mammal having such diseases.
XX SQ Sequence 19 BP; 1 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1895 GTGCCACAGGAGGAG 1912
DB 18 GTGCCACAGGAGGAG 1

RESULT 1405
AEA99304
ID AEA99304 standard; RNA; 19 BP.
XX AC AEA99304;
XX XX
XX DT 11-AUG-2005 (first entry)
XX XX
XX DE Human FasL TNFSF6 gene target and upper siRNA SEQ ID NO:404.
XX XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.
XX XX
XX FN US2005119212-A1.
XX PD 02-JUN-2005.
XX XX
XX PF 18-JUN-2004; 2004US-00871222.
XX PR 18-MAY-2001; 2001US-0292217P.

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PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 20-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-0044853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX XX
XX FA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI
XX PT Haerberli P, Mcswiggen J;
XX DR WPI; 2005-494870/50.
XX XX
XX PT Treating spinal cord injury in subject, involves administering to
XX PT subject, short interfering nucleic acid directing cleavage of Fas RNA
XX PT through RNA interference under conditions suitable to modulate expression
XX PT of Fas in subject.
XX XX
XX PS Claim 33; SEQ ID NO 404; 98pp; English.
XX XX
XX CC The invention relates to a method (M1) for treating spinal cord injury in
XX CC a subject. (M1) involves administering to the subject, a short
XX CC interfering nucleic acid (siRNA) molecule (I) that directs cleavage of a
XX CC Fas RNA through RNA interference (RNAi) under conditions suitable to
XX CC modulate the expression of Fas in the subject. Also described: (1) an
XX CC expression vector comprising (1); (2) a kit comprising (1); (3) a human
XX CC cell comprising (1); (4) a pharmaceutical composition comprising (1); and
XX CC (5) a method of synthesizing (1). The present sequence represents a human
XX CC Fas ligand (FasL) tumor necrosis factor receptor superfamily member 6
XX CC (TNFSF6) target and upper (sense) siRNA oligonucleotide, which is used in
XX CC the exemplification of the present invention.
XX SQ Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.1e+03;
Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2722
DB 2 UACAAAAA 19

RESULT 1406
AEA99408/c
ID AEA99408 standard; RNA; 19 BP.
XX AC AEA99408;
XX XX
XX DT 11-AUG-2005 (first entry)
XX XX
XX DE Human FasL TNFSF6 gene lower siRNA sequence SEQ ID NO:508.
XX XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.

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OS Synthetic.
XX US2005119212-A1.
XX
XX
XX 02-JUN-2005.
XX
XX 18-JUN-2004; 2004US-00871222.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 20-FEB-2002; 2002US-0358580P.
XX 06-MAR-2002; 2002US-0362016P.
XX 11-MAR-2002; 2002US-0363124P.
XX 20-MAY-2002; 2002WO-US015876.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX 20-FEB-2003; 2003WO-US005028.
XX 30-FEB-2003; 2003WO-US005346.
XX 30-APR-2003; 2003US-00427160.
XX 23-MAY-2003; 2003US-0044853.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Haerberli P, Mcswiggen J;
XX
XX WPI; 2005-604870/50.
XX
XX
XX Treating spinal cord injury in subject, involves administering to
PT subject, short interfering nucleic acid directing cleavage of Fas RNA
PT through RNA interference under conditions suitable to modulate expression
PT of Fas in subject.
XX
XX Claim 33; SEQ ID NO 508; 98pp; English.
XX
XX The invention relates to a method (M1) for treating spinal cord injury in
CC a subject. (M1) involves administering to the subject, a short
CC interfering nucleic acid (siRNA) molecule (I) that directs cleavage of a
CC Fas RNA through RNA interference (RNAi) under conditions suitable to
CC modulate the expression of Fas in the subject. Also described: (1) an
CC expression vector comprising (I); (2) a kit comprising (I); (3) a human
CC cell comprising (I); (4) a pharmaceutical composition comprising (I); and
CC (5) a method of synthesizing (I). The present sequence represents a human
CC Fas ligand (FasL) tumor necrosis factor receptor superfamily member 6
CC (TNFRSF6) lower (antisense) siRNA oligonucleotide, which is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 1 A; 0 C; 1 G; 0 T; 17 U; 0 Other;
SQ
Query Match 0.68; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2705 TACTAAAAA 2722
DB 18 TACAAAAA 1
RESULT 1407
AEC90871/c
ID AEC90871 standard; RNA; 19 BP.
XX
XX AEC90871;
```

```
XX
DT 17-NOV-2005 (first entry)
XX
DE STAT-3 siRNA antisense strand, SEQ ID 469.
XX
XX Signal-transducer and activator of transcription-3; RNA interference;
KW gene silencing; cytostatic; antiproliferative; dermatological;
KW antiinflammatory; gastrointestinal-Gen.; cancer; inflammation; psoriasis;
KW eczema; dermatitis; Crohns disease; inflammatory bowel disease; siRNA;
KW short interfering RNA; ss.
OS Synthetic.
XX
XX US2005196781-A1.
XX
XX 08-SEP-2005.
XX
XX 15-DEC-2004; 2004US-00014373.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 20-JUL-2001; 2001US-0306882P.
XX 13-AUG-2001; 2001US-0311863P.
XX 20-FEB-2002; 2002US-0358580P.
XX 06-MAR-2002; 2002US-0362016P.
XX 11-MAR-2002; 2002US-0363124P.
XX 17-MAY-2002; 2002US-00151116.
XX 17-MAY-2002; 2002WO-US015876.
XX 06-JUN-2002; 2002US-0386782P.
XX 22-JUL-2002; 2002US-00201394.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX 20-FEB-2003; 2003WO-US005028.
XX 20-FEB-2003; 2003WO-US005346.
XX 30-APR-2003; 2003US-00427160.
XX 23-MAY-2003; 2003US-0044853.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Robin H, Mcswiggen J;
XX
XX WPI; 2005-604649/62.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
PT acid molecule that directs cleavage of STAT3 RNA through RNA
PT interference, useful for treating cancer and inflammatory diseases e.g.
PT psoriasis in subject or organism.
XX
XX Example 3; SEQ ID NO 469; 266pp; English.
XX
XX The invention relates to a novel chemically synthesized double stranded
CC short interfering nucleic acid molecule that directs cleavage of a signal
CC transducer and activator of transcription 3 (STAT3) RNA by RNA
CC interference. The invention further includes a composition comprising the
CC short interfering nucleic acid in a carrier or diluent. The short
CC interfering nucleic acid has cytostatic, antiproliferative, dermatological,
CC antiinflammatory, and gastrointestinal-Gen. activities. The short
CC interfering nucleic acid or its composition is useful for treating,
CC preventing, inhibiting, or reducing cancer, proliferative, and/or
CC inflammatory diseases, disorders, or conditions in a subject or organism,
CC such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
CC bowel disease, and for any other disease, trait, or condition that is
CC related to or will respond to the levels of STAT3 in a cell or tissue,
```

CC alone or in combination with other treatments or therapies. This oligo
 CC sequence represents a STAT-3 siRNA strand of the invention.
 XX
 SQ Sequence 19 BP; 2 A; 0 C; 2 G; 0 T; 15 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAGAAAAA 2724
 DB 18 CTCAAAAAA 1
 RESULT 1408
 AEC90594
 ID AEC90594 standard; RNA; 19 BP.
 AC AEC90594;
 XX
 DT 17-NOV-2005 (first entry)
 XX
 DE STAT-3 siRNA target/sense strand, SEQ ID 192.
 XX
 KW Signal-transducer and activator of transcription-3; RNA interference;
 KW gene silencing; cytostatic; antiproliferative; dermatological;
 KW anti-inflammatory; gastrointestinal-Gen.; cancer; inflammation; psoriasis;
 KW eczema; dermatitis; Crohn's disease; inflammatory bowel disease; siRNA;
 KW short interfering RNA; ss.
 XX
 OS Synthetic.
 XX
 FN US2005196781-A1.
 XX
 PD 08-SEP-2005.
 XX
 PF 15-DEC-2004; 2004US-00014373.
 XX
 PR 18-MAY-2001; 2001US-0292217P.
 PR 20-JUL-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0382016P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 17-MAY-2002; 2002US-00151116.
 PR 17-MAY-2002; 2002WO-US015876.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 22-JUL-2002; 2002US-00201394.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 20-FEB-2003; 2003US-0440129P.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 30-APR-2003; 2003WO-US005346.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-00444853.
 PR 24-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX
 FA (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 PI Robin H, Mcswiggen J;
 XX
 DR WPI; 2005-604649/62.
 XX
 PT Novel chemically synthesized double stranded short interfering nucleic

PT acid molecule that directs cleavage of STAT3 RNA through RNA
 PT interference, useful for treating cancer and inflammatory diseases e.g.
 PT psoriasis in subject or organism.
 XX
 PS Example 3; SEQ ID NO 192; 266pp; English.
 XX
 CC The invention relates to a novel chemically synthesized double stranded
 CC short interfering nucleic acid molecule that directs cleavage of a signal
 CC transducer and activator of transcription 3 (STAT3) RNA by RNA
 CC interference. The invention further includes a composition comprising the
 CC short interfering nucleic acid in a carrier or diluent. The short
 CC interfering nucleic acid has cytostatic, antiproliferative, dermatological,
 CC anti-inflammatory, and gastrointestinal-Gen. activities. The short
 CC interfering nucleic acid or its composition is useful for treating,
 CC preventing, inhibiting, or reducing cancer, proliferative, and/or
 CC inflammatory diseases, disorders, or conditions in a subject or organism,
 CC such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammation,
 CC bowel disease, and for any other disease, trait, or condition that is
 CC related to or will respond to the levels of STAT3 in a cell or tissue,
 CC alone or in combination with other treatments or therapies. This oligo
 CC sequence represents a STAT-3 siRNA strand of the invention.
 XX
 SQ Sequence 19 BP; 15 A; 2 C; 0 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.1e+03;
 Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAGAAAAA 2724
 DB 2 CUCAAAAA 19
 RESULT 1409
 AEE65553/c
 ID AEE65553 standard; RNA; 19 BP.
 XX
 AC AEE65553;
 XX
 DT 09-FEB-2006 (first entry)
 XX
 DE Human vitamin D receptor siRNA antisense strand, SEQ:451.
 XX
 KW RNA interference; gene silencing; short interfering RNA; siRNA;
 KW hair disease; depilatory; alopecia; atichia; endocrine-gen.;
 KW vitamin D receptor; ss.
 XX
 OS Homo sapiens.
 XX
 FN US2005277608-A1.
 XX
 PD 15-DEC-2005.
 XX
 PF 23-JUL-2004; 2004US-00898311.
 XX
 PR 18-MAY-2001; 2001US-0292217P.
 PR 20-JUL-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0362016P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 17-MAY-2002; 2002WO-US015876.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 20-FEB-2003; 2003WO-US005346.
 PR 16-APR-2003; 2003US-00417012.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-00444853.
 PR 23-OCT-2003; 2003US-00693059.

PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 XX
 XX Gueriolini R, Mcswiggen J;
 PI
 XX WPI; 2006-037965/04.
 DR
 XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of vitamin D receptor RNA through RNA
 PT interference, useful for treating such as alopecia and atrichia.
 PT
 XX Claim 33; SEQ ID NO 451; 238pp; English.
 PS
 XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of the vitamin D receptor
 CC (VDR) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides, can contain deoxyribonucleotides, can be chemically
 CC modified and may be double or single stranded. They further comprise
 CC sense and antisense regions, or alternatively are assembled from a sense
 CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
 CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
 CC (miRNA) and short hairpin RNA (shRNA). The invention also relates to
 CC pharmaceutical compositions comprising an siNA targeted to a human
 CC vitamin D receptor mRNA (see RefSeq accession number NM 000376
 CC (AEE65732)), especially the siRNAs shown in AEE65103-AEE65727. The
 CC invention further discloses expression vectors and host cells comprising
 CC an siNA of the invention. The siNAs are used to modulate expression of
 CC the vitamin D receptor gene in cells, tissue explants or organisms for
 CC the treatment of a variety of conditions. siNAs that downregulate vitamin
 CC D receptor expression may be used to prevent or reduce hair growth, and
 CC can be used to target anaphase in hair follicles for hair removal
 CC (depilation). siNAs that act to upregulate vitamin D receptor expression
 CC (such as those that downregulate the expression of an inhibitor of
 CC vitamin D receptor expression) can be used in the treatment or prevention
 CC of alopecia (e.g., androgenic alopecia), atrichia or other disorder
 CC associated with a deficiency of vitamin D receptor expression. The siNAs
 CC may also be used in drug screening, diagnostics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the antisense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA.
 XX
 XX
 XX Query Match 0.6%; Score 16.4; DB 1; Length 19;
 XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2705 TACTAAAAAAAAAAAAAAA 2722
 Db 18 TACAAAAA
 RESULT 1410
 AEE65297
 ID AEE65297 standard; RNA; 19 BP.
 AC AEE65297;
 XX
 XX 09-FEB-2006 (first entry)
 DT
 XX Human vitamin D receptor target sequence/siRNA sense strand, SEQ:195.
 DE
 XX RNA interference; gene silencing; short interfering RNA; siRNA;
 KW

KW hair disease; depilatory; alopecia; atrichia; endocrine-gen.;
 XX vitamin D receptor; ss.
 XX Homo sapiens.
 OS
 XX US2005277608-A1.
 PN
 XX 15-DEC-2005.
 PD
 XX 23-JUL-2004; 2004US-00898311.
 PF
 XX 18-MAY-2001; 2001US-0292217P.
 PR 20-JUL-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0362018P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 17-MAY-2002; 2002WO-US015876.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 20-FEB-2003; 2003WO-US005346.
 PR 16-APR-2003; 2003US-00417012.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-00444853.
 PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 XX Gueriolini R, Mcswiggen J;
 PI
 XX WPI; 2006-037965/04.
 DR
 XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of vitamin D receptor RNA through RNA
 PT interference, useful for treating such as alopecia and atrichia.
 PT
 XX Claim 33; SEQ ID NO 195; 238pp; English.
 PS
 XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of the vitamin D receptor
 CC (VDR) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides, can contain deoxyribonucleotides, can be chemically
 CC modified and may be double or single stranded. They further comprise
 CC sense and antisense regions, or alternatively are assembled from a sense
 CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
 CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
 CC (miRNA) and short hairpin RNA (shRNA). The invention also relates to
 CC pharmaceutical compositions comprising an siNA targeted to a human
 CC vitamin D receptor mRNA (see RefSeq accession number NM 000376
 CC (AEE65732)), especially the siRNAs shown in AEE65103-AEE65727. The
 CC invention further discloses expression vectors and host cells comprising
 CC an siNA of the invention. The siNAs are used to modulate expression of
 CC the vitamin D receptor gene in cells, tissue explants or organisms for
 CC the treatment of a variety of conditions. siNAs that downregulate vitamin
 CC D receptor expression may be used to prevent or reduce hair growth, and
 CC can be used to target anaphase in hair follicles for hair removal
 CC (depilation). siNAs that act to upregulate vitamin D receptor expression
 CC (such as those that downregulate the expression of an inhibitor of
 CC vitamin D receptor expression) can be used in the treatment or prevention
 CC of alopecia (e.g., androgenic alopecia), atrichia or other disorder
 CC associated with a deficiency of vitamin D receptor expression. The siNAs
 CC may also be used in drug screening, diagnostics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the antisense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA.
 XX
 XX
 XX Query Match 0.6%; Score 16.4; DB 1; Length 19;
 XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2705 TACTAAAAAAAAAAAAAAA 2722
 Db 18 TACAAAAA
 RESULT 1410
 AEE65297
 ID AEE65297 standard; RNA; 19 BP.
 AC AEE65297;
 XX
 XX 09-FEB-2006 (first entry)
 DT
 XX Human vitamin D receptor target sequence/siRNA sense strand, SEQ:195.
 DE
 XX RNA interference; gene silencing; short interfering RNA; siRNA;
 KW

CC may also be used in drug screening, diagnostics, therapeutics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the sense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA, which is identical to the human vitamin D receptor transcript
 CC variant 1 target sequence.

XX Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.1e+03;

Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTTAAAAAATAAAAA 2722

DB 2 UACAAAAAATAAAAA 19

RESULT 1411

AEF36928

ID AEF36928 standard; RNA; 19 BP.

AC AEF36928;

XX 23-MAR-2006 (first entry)

DE Human SDF-1 (CXCL12b) target sequence/siRNA sense strand, SEQ:395.

XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW neoplasm; hyperproliferation; cytostatic; respiratory disease;
 KW respiratory-gen.; cardiovascular disease; cardiovascular-gen.;
 KW ocular disease; ophthalmological; diabetic retinopathy; antidiabetic;
 KW stromal cell-derived factor-1; SDF-1; chemokine CXCL12; chemokine CXCL12;
 KW CXCL12; ss.

OS Homo sapiens.

XX US2006019917-A1.

PN US2006019917-A1.

XX 26-JAN-2006.

XX 27-MAY-2005; 2005US-00140328.

XX 18-MAY-2001; 2001US-0292217P.

XX 20-JUL-2001; 2001US-0306883P.

XX 13-AUG-2001; 2001US-0311865P.

XX 20-FEB-2002; 2002US-0358580P.

XX 06-MAR-2002; 2002US-0362016P.

XX 11-MAR-2002; 2002US-0363124P.

XX 17-MAY-2002; 2002US-0386782P.

XX 06-JUN-2002; 2002US-0406784P.

XX 29-AUG-2002; 2002US-0408378P.

XX 05-SEP-2002; 2002US-0409293P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2003; 2003WO-US005346.

XX 30-APR-2003; 2003US-00427160.

XX 23-MAY-2003; 2003US-00444853.

XX 23-OCT-2003; 2003US-00693059.

XX 24-NOV-2003; 2003US-00720448.

XX 03-DEC-2003; 2003US-00727780.

XX 14-JAN-2004; 2004US-00757803.

XX 10-FEB-2004; 2004US-0543480P.

XX 13-FEB-2004; 2004US-00780447.

XX 16-APR-2004; 2004US-00826966.

XX 30-APR-2004; 2004WO-US013456.

XX 24-MAY-2004; 2004WO-US016390.

XX 20-AUG-2004; 2004US-00923536.

XX 09-FEB-2005; 2005WO-US004270.

XX 04-APR-2005; 2005US-00098303.

XX

(SIRN-) SIRNA THERAPEUTICS INC.

PI Guerciollini R, Mcswiggen J;

XX WPI; 2006-134231/14.

XX Chemically synthesized double-stranded short interfering nucleic acid
 PT molecule directing cleavage of stromal cell derived factor-1 RNA, useful
 PT for treating cancer and ocular, respiratory and cardiovascular diseases.

XX Example 3; SEQ ID NO 395; 384pp; English.

XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siRNAs) which downregulate stromal cell-derived factor-1 (SDF-1,
 CC chemokine CXCL12) gene expression by RNA
 CC interference. The siRNAs are characterized in that one or more nucleotides
 CC is chemically modified to reduce the immunostimulatory properties of each
 CC siRNA to a level below that of a corresponding unmodified siRNA.

CC Additionally, the siRNAs may or may not comprise ribonucleotides, can
 CC contain deoxyribonucleotides, and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.

CC Specifically, the siRNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The
 CC invention also relates to pharmaceutical compositions comprising an siRNA
 CC targeted to an SDF-1 mRNA. The siRNAs of the invention are used to
 CC modulate expression of the SDF-1 gene in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used in the
 CC treatment of cancer and other proliferative conditions, respiratory
 CC diseases, cardiovascular diseases and ocular diseases, and are especially
 CC useful for the treatment of diabetic retinopathy (proliferative
 CC retinopathy). The siRNAs may also be used in drug screening, diagnosis,
 CC therapeutic target identification and validation, genetic engineering,
 CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
 CC single nucleotide polymorphisms). The present sequence represents the
 CC sense strand of a double-stranded siRNA targeted to human SDF-1
 CC transcript variant 1 (CXCL12b), which is identical to the human SDF-1
 CC variant 1 target sequence.

XX Sequence 19 BP; 16 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;

Best Local Similarity 94.4%; Pred. No. 1.1e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAA 2723

DB 2 ACCAAAAAATAAAAA 19

RESULT 1412

AEF37107/C

ID AEF37107 standard; RNA; 19 BP.

XX AEF37107;

AC AEF37107;

XX 23-MAR-2006 (first entry)

XX Human SDF-1 (CXCL12b) siRNA antisense strand, SEQ:574.

XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW neoplasm; hyperproliferation; cytostatic; respiratory disease;
 KW respiratory-gen.; cardiovascular disease; cardiovascular-gen.;
 KW ocular disease; ophthalmological; diabetic retinopathy; antidiabetic;
 KW stromal cell-derived factor-1; SDF-1; chemokine CXCL12; chemokine CXCL12;
 KW CXCL12; ss.

OS Homo sapiens.

XX US2006019917-A1.

PN US2006019917-A1.

XX 26-JAN-2006.

XX

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XX PF 27-MAY-2005; 2005US-00140328.
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-JUL-2001; 2001US-0306883P.
XX PR 13-AUG-2001; 2001US-0311865P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 17-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005346.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-00444853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004WO-US013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX PR 20-AUG-2004; 2004US-00923536.
XX PR 09-FEB-2005; 2005WO-US004270.
XX PR 04-APR-2005; 2005US-00098303.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PA Gueriolini R, Mcswiggen J;
XX PI WPI; 2006-134231/14.
XX DR
XX
XX Chemically synthesized double-stranded short interfering nucleic acid
XX PT molecule directing cleavage of stromal cell derived factor-1 RNA, useful
XX PT for treating cancer and ocular, respiratory and cardiovascular diseases.
XX PS Example 3; SEQ ID NO 574; 384pp; English.
XX
XX The invention relates to chemically synthesized short interfering nucleic
XX CC acids (siNAs) which downregulate stromal cell-derived factor-1 (SDF-1,
XX CC chemokine CXCL12, CXCL12) gene expression by RNA
XX CC interference. The siNAs are characterized in that one or more nucleotides
XX CC is chemically modified to reduce the immunostimulatory properties of each
XX CC siNA to a level below that of a corresponding unmodified siNA.
XX CC Additionally, the siNAs may or may not comprise ribonucleotides, can
XX CC contain deoxyribonucleotides, and may be double or single stranded. They
XX CC further comprise sense and antisense regions, or alternatively are
XX CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX CC Specifically, the siNAs include short interfering RNA (siRNA), double-
XX CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The
XX CC invention also relates to pharmaceutical compositions comprising an siNA
XX CC targeted to an SDF-1 mRNA. The siNAs of the invention are used to
XX CC modulate expression of the SDF-1 gene in cells, tissue explants or
XX CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX CC for the treatment of a variety of conditions. They may be used in the
XX CC treatment of cancer and other proliferative conditions, respiratory
XX CC diseases, cardiovascular diseases and ocular diseases, and are especially
XX CC useful for the treatment of diabetic retinopathy (proliferative
XX CC retinopathy). The siNAs may also be used in drug screening, diagnosis,
XX CC therapeutic target identification and validation, genetic engineering,
XX CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
XX CC single nucleotide polymorphisms). The present sequence represents the
XX CC antisense strand of a double-stranded siRNA targeted to human SDF-1
XX CC transcript variant 1 (CXCL12b).
XX SQ Sequence 19 BP; 0 A; 0 C; 3 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2723
Db 18 ACCAAAAA 1

RESULT 1413
AAV12302
ID AAV12302 standard; DNA; 20 BP.
XX AC AAV12302;
XX DT 17-JUN-1998 (first entry)
XX DE Ribonucleotide reductase R1 3'UTR fragment SEQ ID NO:46.
XX KW Ribonucleotide reductase R1; 3'-untranslated region; 3'UTR; tumour;
XX KW housekeeping gene; identification; modulator; metastasis; neoplastic;
XX KW papilloma; atherosclerosis; angiogenesis; viral infection; ss.
XX OS Homo sapiens.
XX PN WO9800532-A2.
XX PD 08-JAN-1998.
XX PF 30-JUN-1997; 97WO-CA000454.
XX PR 01-JUL-1996; 96US-0021152P.
XX PA (WRIG/) WRIGHT J A.
XX PA (YOUNG/) YOUNG A H.
XX PI Wright JA, Young AH;
XX WPI; 1998-086958/08.
XX New oligo-nucleotide(s) complementary to untranslated regions of
XX PT housekeeping genes - are useful in, e.g. identifying modulators of tumour
XX PT growth/metastasis and inhibiting growth of neoplastic cells.
XX PS Claim 4; Page 29; 64pp; English.
XX
XX The present sequence represents a 3'-untranslated region (3'UTR) fragment
XX CC of ribonucleotide reductase R1. The present invention describes: (1)
XX CC oligonucleotides (ON) comprising at least 7 consecutive nucleotides (nt)
XX CC or their analogues of a UTR of a housekeeping gene; (2) antisense ON
XX CC (AON) complementary to ON; (3) ribozymes (Rb) complementary or homologous
XX CC to ON, and able to cleave it; (4) DNA sequence encoding ON, AON and Rb;
XX CC (5) an antibody (Ab) that binds to ON, AON, Rb and Ab are used to modulate
XX CC that hybridise to ON, AON and Rb. ON, AON, Rb and Ab are used to modulate
XX CC (especially inhibit) growth of tumour cells (especially neoplastic cells)
XX CC and to reduce their capacity for metastasis. The above may also be used
XX CC to treat benign proliferative disorders e.g. papillomas, atherosclerosis,
XX CC angiogenesis and viral infections, e.g. human immunodeficiency virus,
XX CC hepatitis or herpes. ON may further be used: (i) to identify modulators
XX CC of tumour growth/metastasis; (ii) to identify compounds (especially
XX CC potential antitumour agents) that inhibit or enhance interaction between
XX CC ON and its binding substances; (iii) as probes for detecting related
XX CC sequences, and (iv) to generate Ab, used for detection and quantification
XX CC of UTR especially for monitoring progress of cancer therapy. SON inhibit
XX CC tumorigenicity of neoplastic cells, particularly where these are
XX CC resistant to hydroxyurea
XX SQ Sequence 20 BP; 17 A; 1 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1414
AAC68768
ID AAC68768 standard; DNA; 20 BP.
XX AC
XX AAC68768;
XX 20-FEB-2001 (first entry)
XX Human FUT6 antisense oligonucleotide SEQ ID NO: 19.
XX Human; fucosyltransferase; FUT3; FUT6; cancer; antisense oligonucleotide;
XX PCR primer; ss.
XX Homo sapiens.
XX WO200064262-A1.
XX 02-NOV-2000.
XX 20-APR-2000; 2000WO-US010547.
XX 26-APR-1999; 99US-0131068P.
XX (UYNC-) UNIV NORTH CAROLINA.
XX Weston BW, Hiller KM;
XX WPI; 2000-687246/67.
XX Novel antisense human fucosyltransferase sequences useful for treating
XX cancer including breast, lung, gastric, renal and uterine cancer.
XX Claim 7; Page 33; 53pp; English.
XX The present invention provides antisense oligonucleotides to the human
XX fucosyltransferase coding sequences, particularly FUT3 and FUT6. These
XX antisense sequences can be used in the treatment of cancer, especially
XX colon, pancreatic, ovarian, gastric, breast, lung, hepatocellular,
XX prostate, bladder, renal cell and uterine cancers. In addition, they can
XX also be used in the treatment of animals such as dogs, cats and horses
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2565 TCTCCTGAGCTAGGAAGA 2582
Db 3 TCTCCTGAGCTAGGAAGA 20

RESULT 1415
AAA91207/C
ID AAA91207 standard; DNA; 20 BP.
XX AC
XX AAA91207;
XX 08-MAY-2001 (first entry)
XX Antisense IGFBP-5 inhibitor #13.
XX Insulin-like growth factor binding protein-5; IGFBP-5; human;
XX antisense oligonucleotide; hormone-regulated cancer; prostatic cancer;
XX breast cancer; therapy; ss.
XX Homo sapiens.
XX
```

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PN WO200105435-A2.
XX 25-JAN-2001.
XX 19-JUL-2000; 2000WO-CA000853.
XX 19-JUL-1999; 99US-0144495P.
XX (UYBR-) UNIV BRITISH COLUMBIA.
XX (MIYA/) MIYAKE H.
XX Gleave M;
XX WPI; 2001-168448/17.
XX Composition for treating hormone-regulated cancer, e.g. breast and
XX prostatic tumors, comprising an antisense oligonucleotide that inhibits
XX expression of insulin like growth factor binding protein-5 by hormone-
XX regulated tumor cells.
XX Disclosure; Page 34; 45pp; English.
XX This sequence represents an antisense oligonucleotide targeted against
XX human insulin-like growth factor binding protein-5 (IGFBP-5). The
XX invention relates to a composition for treatment of hormone-regulated
XX cancer, comprising an antisense oligonucleotide (such as this sequence)
XX which inhibits expression of IGFBP-5 by hormone-regulated tumor cells.
XX The compositions is useful for delaying progression of hormone-regulated
XX tumor cells such as prostatic cancer cells or breast cancer cells, to an
XX androgen-independent state, by treating hormone sensitive tumor cells
XX with the antisense sequence which inhibits expression of IGFBP-5 by the
XX tumor cells. The composition can also be used for treating a hormone-
XX responsive cancer in an individual, and administering the composition to
XX the individual after initiation of hormone-withdrawal to induce apoptotic
XX cell death of hormone-responsive tumor cells, and therefore delaying the
XX progression of hormone-responsive cancer cells to a hormone-independent
XX state in the individual. It can also be used for inhibiting or delaying
XX administration of hormone progression of an IGF-1 sensitive tumor in a mammal, by
XX administering the composition to inhibit the expression of IGFBP-5 by the
XX hormone-responsive cancer cells, and therefore inhibiting or delaying
XX metastatic bone progression of the tumor
XX
XX Sequence 20 BP; 3 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TGAATAAAAAAAAAAAAAA 1

RESULT 1416
ADF87936/C
ID ADF87936 standard; DNA; 20 BP.
XX AC
XX ADF87936;
XX 26-FEB-2004 (first entry)
XX Single nucleotide polymorphism detection primer, SEQ ID No 1519.
XX human; single nucleotide polymorphism; microarray; side effect; ss;
XX primer; PCR.
XX Synthetic.
XX Homo sapiens.
XX JP2003235571-A.
XX 26-AUG-2003.
XX
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PF 12-FEB-2002; 2002JP-00034717.
XX
XX 12-FEB-2002; 2002JP-00034717.
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2003-820454/77.
XX
XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
XX in human gene.
XX
XX Claim 2; SEQ ID NO 1519; 704pp; Japanese.
XX
XX The invention relates to a novel polynucleotide isolated and purified
XX from a human gene having any one of 935 fully defined sequences as given
XX in specification, or a sequence having a base substitution. The invention
XX further relates to: an oligonucleotide containing single nucleotide
XX polymorphisms; a PCR primer set chosen from the combination of two DNA
XX fragments from any one of 1220 fully defined sequences as given in
XX specification; a labelling probe containing the SNP containing oligo; and
XX a microarray equipped with the SNP containing oligo. The isolated human
XX gene of the invention is useful for detecting the single nucleotide
XX polymorphisms in human gene. The isolated human gene is also useful for
XX diagnosis of disease and determination of side effect to a medical agent.
XX The isolated human gene is also effective in detecting single nucleotide
XX polymorphisms in a human gene. This polynucleotide sequence represents
XX one of the PCR primers used in the single nucleotide polymorphism
XX detection method of the invention.
XX
XX Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2210 GGCTCTTGGTGATGAG 2227
Db 18 GGCTCTTGGTGATGAG 1
|||||
RESULT 1417
ABZ85532
ID ABZ85532 standard; DNA; 20 BP.
XX
XX ABZ85532;
AC
XX 17-OCT-2003 (first entry)
DT
XX Human oligonucleotide sequence.
DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US011315.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
DR

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XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 774; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 17 A; 2 C; 1 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAACAAAAA 2724
Db 3 CCAACAAAAA 20
|||||
RESULT 1418
ABD21762
ID ABD21762 standard; DNA; 20 BP.
XX
XX ABD21762;
AC
XX 29-JUL-2004 (first entry)
DT
XX Human stannocalcin-derived oligo SEQ ID 774.
DE
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX WO200285309-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013143.
PF
XX 24-APR-2001; 2001US-0286036P.
PR
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX

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XX DR WPI; 2003-093058/08.
 XX PT Pharmaceutical composition for treating asthma, has antisense
 XX PT oligonucleotide containing less percentage of adenosine, targeted to
 XX PT nucleic acids associated with lung airway or lung dysfunction, and
 XX PT bronchodilating agent.
 XX PS Claim 15; SEQ ID NO 774; 763pp; English.
 XX CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX SQ Sequence 20 BP; 17 A; 2 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAACCAAAAAAAAAAAAAA 2724
 Db 3 CCAAAAAAAAAAAAAAAAAA 20
 RESULT 1419
 ADH66380/C
 ID ADH66380 standard; DNA; 20 BP.
 AC ADH66380;
 XX XX
 XX 25-MAR-2004 (first entry)
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #3214.
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX Homo sapiens.
 OS
 XX WO2003099215-A2.
 PN
 XX 04-DEC-2003.
 PD
 XX

PF 20-MAY-2003; 2003WO-US016084.
 XX PR 20-MAY-2002; 2002US-0381857P.
 XX PA (PHAA) PHARMACIA CORP.
 XX PI Crosby SD, Nalseth AE;
 XX DR WPI; 2004-035034/03.
 XX PT New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.
 XX PS Claim 4; SEQ ID NO 3214; 985pp; English.
 XX CC The invention comprises an antisense oligonucleotide that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 XX SQ Sequence 20 BP; 2 A; 1 C; 1 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAACCAAAAAAAAAAAAAA 2725
 Db 18 TCACCAAAAAAAAAAAAAAAAA 1
 RESULT 1420
 ADJ61530
 ID ADJ61530 standard; DNA; 20 BP.
 AC ADJ61530;
 XX XX
 XX 05-MAY-2004 (first entry)
 DT Oligonucleotide associated to IL5R-X61176 #222.
 DE
 XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW ss.
 XX Homo sapiens.
 OS
 XX WO2004011613-A2.
 PN
 XX 05-FEB-2004.
 PD
 XX 25-JUL-2003; 2003WO-US023509.
 PF
 XX 29-JUL-2002; 2002US-0399076P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 PI WPI; 2004-203534/19.
 DR
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory

PT disease e.g., asthma.
 XX Claim 2; SEQ ID NO 2386; 85pp; English.
 XX
 CC The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1969 CTTTGCTGAGTAAAG 1986
 Db 1 CTTTGCTGAGTAAAG 18
 RESULT 1421
 ADK73725/c
 ID ADK73725 standard; DNA; 20 BP.
 XX
 AC ADK73725;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1059.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004016754-A2.
 XX
 PD 26-FEB-2004.
 XX
 PF 14-AUG-2003; 2003WO-US025465.
 XX
 PR 14-AUG-2002; 2002US-0403416P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PA Robert's SL;
 PI
 DR WPI; 2004-203785/19.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 XX Claim 4; SEQ ID NO 1059; 417pp; English.
 PS
 XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 SQ Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2725
 Db 18 TCAAAAAAAAAAAAAAAAAA 1
 RESULT 1422
 ADO46920
 ID ADO46920 standard; DNA; 20 BP.
 XX
 AC ADO46920;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human oligonucleotide #2286.
 XX
 KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
 KW tryptase b; PDE4 A; PDE4 C; PDE4 D; PDE4 E; adenosine A receptor;
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KW asthma; lung allergy; inflammation; inflammatory disease;
 KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KW acute respiratory distress syndrome; pulmonary hypertension;
 KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
 XX
 OS Homo sapiens.
 XX
 PN US2004049022-A1.
 XX
 PD 11-MAR-2004.
 XX
 PF 25-JUL-2003; 2003US-00627930.
 XX
 PR 23-APR-2002; 2002WO-US013135.
 PR 23-APR-2002; 2002WO-US013143.
 XX
 PA (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX
 XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-293804/27.
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 XX Claim 2; SEQ ID NO 2386; 174pp; English.
 PS

XX The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC triptase a, triptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, triptase a,
 CC triptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.

XX SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1969 CTTTGTGCGATGATAAAG 1986
 DB 1 CTTTGTGCGAGTAAAG 18
 |||||
 |||||

RESULT 1423
 ADP69379/c
 ID ADP69379 standard; DNA; 20 BP.
 XX
 AC ADP69379;
 DT 09-SEP-2004 (first entry)
 XX
 DE Human mitonEET-specific antisense oligonucleotide #273.
 .KW human; antisense oligonucleotide; mitochondrial membrane;
 KW insulin sensitising antidiabetic thiazolidinediones; mitonEET; diabetes;
 KW immunological disorder; cardiovascular disorder; including hypertension;
 KW neurological disorders; ischaemia; reperfusion; ss;
 KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
 XX Homo sapiens.
 OS
 XX WO2004053060-A2.
 PN
 XX 24-JUN-2004.
 PD
 XX 25-NOV-2003; 2003WO-US037621.
 PF
 XX 06-DEC-2002; 2002US-0431529P.
 PR
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Colca JR;
 PI
 XX WPI; 2004-468836/44.
 DR
 XX New antisense oligonucleotides encoding mitonEET, useful for modulating
 PT mitonEET expression or for treating diseases associated with mitonEET,
 PT e.g. diabetes, immunological disorders or cardiovascular disorders.
 XX

PS Claim 4; SEQ ID NO 273; 226pp; English.
 XX The invention comprises antisense oligonucleotides that are targeted to
 CC the nucleic acids encoding a family of human proteins from mitochondrial
 CC membranes, which bind insulin sensitising antidiabetic
 CC thiazolidinediones (referred to as: mitonEET). The antisense
 CC oligonucleotides of the invention are useful for modulating mitonEET
 CC expression and for treating diseases or conditions associated with
 CC mitonEET, such as: diabetes, immunological disorders, cardiovascular
 CC disorders including hypertension, neurological disorders, and
 CC ischaemia/reperfusion injuries. The present DNA sequence represents a
 CC mitonEET-specific antisense oligonucleotide of the invention. NOTE: The
 CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
 CC phosphorothioate backbone.

XX SQ Sequence 20 BP; 3 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2725
 DB 18 TAAAAAATAAAAAA 1
 |||||
 |||||

RESULT 1424
 AAX18389/c
 ID AAX18389 standard; DNA; 18 BP.
 XX
 AC AAX18389;
 DT 11-MAY-1999 (first entry)
 XX
 DE RT-PCR primer of the invention SEQ ID 30.
 XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 OS Synthetic.
 XX JP11032765-A.
 PN
 XX 09-FEB-1999.
 PD
 XX 18-JUL-1997; 97JP-00208312.
 PF
 XX 18-JUL-1997; 97JP-00208312.
 PR
 XX (TAKI) TAKARA SHUZO CO LTD.
 PA
 XX WPI; 1999-183822/16.
 DR
 XX Peptides having at least two new nucleotides - useful as primers in RT-
 PT PCR.
 PT
 XX Example 1; Page 12; 19pp; Japanese.
 PS
 XX This sequence represents a primer of the invention. The invention relates
 CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
 CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
 CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
 CC natural number indicating the repetition of alpha; beta, delta = V or N;
 CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
 CC thymine; gamma = thymine; k = natural number of 3 or over indicating the
 CC repetition of gamma, in which thymine expressed by gamma is composed of
 CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
 CC useful as primers for RT-PCR and determination of base sequences. The new
 CC sequences allow for reproductive and highly efficient analysis of gene
 CC sequences

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;
 Query Match 0.6%; Score 16.2; DB 1; Length 18;


```

Best Local Similarity 94.1%; Pred. No. 1.1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 16; Conservative 1;

QY 2708 TAAAAAATAAAAA 2724
    :|||||||
Db 17 BAAAAAATAAAAA 1

RESULT 1425
AAAX18368/c
ID AAX18368 standard; DNA; 16 BP.
XX
AC AAX18368;
DT 11-MAY-1999 (first entry)
DE RT-PCR primer of the invention SEQ ID 9.
KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX
OS Synthetic.
XX
PN JP11032765-A.
XX
PD 09-FEB-1999.
XX
PF 18-JUL-1997; 97JP-00208312.
XX
PR 18-JUL-1997; 97JP-00208312.
XX
PA (TAKI ) TAKARA SHUZO CO LTD.
XX
DR WPI; 1999-183822/16.
XX
PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.
XX
PS Disclosure; Page 10; 19pp; Japanese.
XX
CC This sequence represents a primer of the invention. The invention relates
CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
CC natural number indicating the repetition of alpha; beta, delta = V or N;
CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
CC thymine; gamma = thymine; k = natural number of 3 or over indicating the
CC repetition of gamma, in which thymine expressed by gamma is composed of
CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
CC useful as primers for RT-PCR and determination of base sequences. The new
CC sequences allow for reproductive and highly efficient analysis of gene
CC sequences
XX
SQ Sequence 16 BP; 1 A; 0 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAA 2722
    :|||||||
Db 16 CTAAAAAATAAAAA 1

RESULT 1426
AAAX07568
ID AAX07568 standard; cDNA; 16 BP.
XX
AC AAX07568;
DT 21-JUN-1999 (first entry)
DE Homo sapiens fetal kidney clone AK647 secreted protein gene 3' end.
XX

```

```

KW Secreted protein; fetal kidney; ds.
XX
OS Homo sapiens.
XX
PN WO9900405-A1.
XX
PD 07-JAN-1999.
XX
PF 29-JUN-1998; 98WO-US013530.
XX
PR 30-JUN-1997; 97US-00885610.
XX
PA (GEMY ) GENETICS INST INC.
XX
PI Jacobs K, McCoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;
PI Evans C, Agostino MJ;
XX
DR WPI; 1999-095671/08.
XX
PT New polynucleotides encoding secreted human proteins - are derived from
PT fetal kidney or adult retina cDNA libraries, used as, e.g. potential
PT vaccines.
XX
PS Disclosure; Page 54; 76pp; English.
XX
CC The sequence is that of the 3' end of a sequence encoding a secreted
CC protein from a human fetal kidney clone AK296. Such a sequence is
CC predicted to have biological activities which would make them suitable
CC for treating, preventing or ameliorating medical conditions in humans and
CC animals, although no supporting data is given. Suggested activities
CC include nutritional activity, cytokine and cell
CC proliferation/differentiation activity, immune stimulating (e.g. as
CC vaccines) or suppressing activity, haematopoiesis regulating activity,
CC tissue growth activity, activin/inhibin activity,
CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
CC invasion suppressor activity, and tumour inhibition activity. It is also
CC stated to be useful for gene therapy
XX
SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAA 2724
    :|||||||
Db 1 AAAAAAATAAAAA 16

RESULT 1427
AAC66068
ID AAC66068 standard; DNA; 16 BP.
XX
AC AAC66068;
XX
DT 22-FEB-2001 (first entry)
XX
DE DNA chip primer #4.
XX
KW DNA chip; primer; nucleoside derivative; photolabile protecting group;
KW photolithographic nucleic acid chip; ss.
XX
OS Synthetic.
XX
PN WO200061594-A2.
XX
PD 19-OCT-2000.
XX
PF 07-APR-2000; 2000WO-DE001148.
XX
PR 08-APR-1999; 99DE-01015867.
PR 28-JAN-2000; 2000DE-01003631.

```

XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX
 PI Beier M, Hoheisel J;
 XX
 XX WPI; 2000-679457/66.
 XX
 XX New nucleoside derivatives with photolabile protecting groups, useful in
 PT oligonucleotide synthesis, particularly on solid phases, e.g. for
 PT hybridization testing.
 XX
 XX Disclosure; Fig 9; 48pp; German.
 XX
 XX This invention describes nucleoside derivatives (I) with photolabile
 CC protecting groups. (I) are used to synthesize oligonucleotides using the
 CC photolithographic nucleic acid chip method, particularly where these are
 CC intended for performing enzymatic reactions initiated from a free 3'-
 CC hydroxy (especially solid-phase polymerase reactions or ligase reactions,
 CC but also reverse transcription, cDNA synthesis etc.), also for
 CC hybridization testing, sequencing and in DNA computing. (I) are produced
 CC with high selectivity by reaction with a mild acylating agent that has
 CC high specificity for the 3'-position, without significant side-reactions
 CC (cf. more reactive acylating agents such as chloroformates)
 XX
 SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 1 AAAAAAAAAAAAAA 16
 RESULT 1428
 ABA04585/C
 ID ABA04585 standard; DNA; 16 BP.
 XX
 AC ABA04585;
 XX
 XX 15-FEB-2002 (first entry)
 XX
 DE Oligonucleotide #5.
 XX
 KW Analytical support; genomic sequencing; mutation detection;
 KW pharmaceutical development; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = Fl(CH2)6-PO-thymine, where Fl is flavine
 FT and PO is a phosphate group"
 XX
 XX FR2805348-A1.
 XX
 XX 24-AUG-2001.
 XX
 XX 23-FEB-2000; 2000FR-00002236.
 XX
 XX 23-FEB-2000; 2000FR-00002236.
 XX
 XX (COMS) COMMISSARIAT ENERGIE ATOMIQUE.
 XX
 PI Cuzin M, Peltie P, Fontecave M, Decout JL, Dueymes C;
 XX
 XX WPI; 2001-628265/73.
 XX
 XX Support for hybridization analysis of nucleic acids for sequencing
 PT techniques, comprises an array of oligonucleotides having a label where

PT the fluorescence changes follow hybridization.
 XX
 PS Example 1; Page 12; 33pp; French.
 XX
 CC The present invention relates to an analytical support, to which a number
 CC of oligonucleotides are fixed. The oligonucleotides are labelled with a
 CC fluorescent compound, the fluorescence of which varies when the
 CC oligonucleotide hybridises to its complement. The analytical support is
 CC useful in hybridisation testing for identification of specific nucleic
 CC acids, such as genomic sequencing, detecting mutations or pharmaceutical
 CC development. The present oligonucleotide was used to illustrate the
 CC invention
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1429
 AAF30895/C
 ID AAF30895 standard; DNA; 16 BP.
 XX
 AC AAF30895;
 XX
 XX 09-JUL-2001 (first entry)
 XX
 DE Oligonucleotide-minor groove binder complex.
 XX
 KW ODN-MGB-LF; oligonucleotide; minor groove binder; latent fluorophore;
 KW hybridisation; detection; fluorescence; probe; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /tag= a
 FT /note= "thymine modified by a minor groove binder (2-
 FT dimethylaminonaphthalene-6- sulfonamide"
 XX
 XX WO200131063-A1.
 XX
 XX 03-MAY-2001.
 XX
 XX 26-OCT-2000; 2000WO-US029786.
 XX
 XX 26-OCT-1999; 99US-00428236.
 XX
 XX (BPOC-) EPOCH BIOSCIENCES INC.
 XX
 XX Dempcy RO, Afonina IA, Vermeulen NMJ;
 XX
 XX WPI; 2001-328656/34.
 XX
 XX Conjugate of oligonucleotide, minor groove binder and latent fluorophore,
 PT useful for detecting specific nucleic acids, e.g. for single-nucleotide
 PT mismatch discrimination.
 XX
 XX Disclosure; Page 101; 105pp; English.
 PS
 XX
 CC The present sequence is that of an oligonucleotide (ODN)-minor groove
 CC binder (MGB) complex. MGBs bind in a non-intercalating manner to the
 CC minor groove of non-single-stranded DNA, RNA or their hybrids. ODN-MGB-LF
 CC conjugates of the invention also comprise a latent fluorophore (LF),
 CC which binds similarly to the MGB but in an intercalating manner, or lies
 CC in the minor groove, or is oriented in some other way to the DNA molecule
 CC by MGB, such that it becomes fluorescent (or its fluorescent properties
 CC change detectably). The conjugates are used as hybridisation probes and

CC amplification primers for fluorescent detection of specifically
CC hybridising sequences, for analysis or diagnosis, especially (real-time)
CC PCR, for single-nucleotide mismatch discrimination, target or signal
CC amplification, array-based assays and sequencing, including detection of
CC double-stranded DNA by triplex formation
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
DB 16 AAAAAAAAAAAAAA 1

RESULT 1430
AAF30880/c
ID AAF30880 standard; DNA; 16 BP.
XX
AC AAF30880;
XX
DT 09-JUL-2001 (first entry)
XX
DE Oligonucleotide portion of ODN-MGB-LF conjugate.
XX
KW ODN-MGB-LF; oligonucleotide; minor groove binder; latent fluorophore;
KW hybridisation; detection; fluorescence; probe; ss.
XX
OS Synthetic.
XX
PN WO200131063-A1.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029786.
XX
PR 26-OCT-1999; 99US-00428236.
XX
PA (EPOCH-) EPOCH BIOSCIENCES INC.
XX
PI Dempcy RO, Afonina IA, Vermeulen NMJ;
XX
DR WPI; 2001-328656/34.
XX
PT Conjugate of oligonucleotide, minor groove binder and latent fluorophore,
PT useful for detecting specific nucleic acids, e.g. for single-nucleotide
PT mismatch discrimination.
XX
PS Disclosure; Page 58; 105pp; English.
XX
CC The present sequence is that of the oligonucleotide (ODN) component of an
CC ODN-MGB (minor groove binder)-LF (latent fluorophore) conjugate of the
CC invention. MGBs bind in a non-intercalating manner to the minor groove of
CC non-single-stranded DNA, RNA or their hybrids, while a LF binds similarly
CC but in an intercalating manner, or lies in the minor groove, or is
CC oriented in some other way to the DNA molecule by MGB, such that it
CC becomes fluorescent (or its fluorescent properties change detectably).
CC The conjugates are used as hybridisation probes and amplification primers
CC for fluorescent detection of specifically hybridising sequences, for
CC analysis or diagnosis, especially (real-time) PCR, for single-nucleotide
CC mismatch discrimination, target or signal amplification, array-based
CC assays and sequencing, including detection of double-stranded DNA by
CC triplex formation. Many different targets can be detected a single
CC reaction vessel. The present ODN-MGB-LF conjugate was used to demonstrate
CC hybridisation-triggered fluorescence. Upon hybridisation to the
CC complementary target sequence there was an increase in fluorescence
CC yield, measured as the ratio of the fluorescence emitted by the hybrid
CC between the ODN-MGB-LF conjugate and its target sequence to the
CC fluorescence emitted by unhybridised (i.e. single-stranded) ODN-MGB-LF,
CC of 8.3

SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
DB 16 AAAAAAAAAAAAAA 1

RESULT 1431
AAH42481/c
ID AAH42481 standard; DNA; 16 BP.
XX
AC AAH42481;
XX
DT 01-OCT-2001 (first entry)
XX
DE Oligonucleotide used to produce branched chain compounds.
XX
KW Branched chain compound; nucleic acid synthesis; primer extension;
KW reverse transcription; nucleic acid hybridization;
KW nucleic acid amplification; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*note= "COOH attached"
FT misc_feature 2.3
FT /*tag= c
FT /*note= "branch present"
FT modified_base 2
FT /*tag= b
FT /*note= "COOH attached"
XX
EP1111068-A1.
XX
PD 27-JUN-2001.
XX
PF 21-DEC-1999; 99EP-00125484.
XX
PR 21-DEC-1999; 99EP-00125484.
XX
PA (LION-) LION BIOSCIENCE AG.
PA (VBCG-) VBC GENOMICS GMBH.
XX
PI Schmidt W, Hiller R, Huber M, Mueller M;
XX
DR WPI; 2001-466959/51.
XX
PT Branched compounds useful in e.g. nucleic acid synthesis reaction
PT comprises nucleic acid moieties optionally extended by a polymerase.
XX
PS Example 1; Page 10; 31pp; English.
XX
CC The specification describes branched compounds containing nucleic acid
CC moieties optionally extended by a polymerase. The branched chain
CC compounds of the invention are used in nucleic acid synthesis reaction,
CC primer extension reaction, reverse transcription reaction of RNA into
CC DNA, nucleic acid hybridization experiment (for identifying sequence of a
CC nucleic acid), and nucleic acid amplification experiment (for analysing
CC the expression pattern of genes). The compounds are also used in solid-
CC phase enzymatic reactions. The present sequence was used in the course of
CC the invention to produce branched chain compounds
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	2709	AAAAAAAAAAAAAAAAA	2724
Db	16	AAAAAAAAAAAAAAAAA	1
RESULT 1432			
ABAS97402/c			
ID	ABAS97402	standard; DNA; 16 BP.	
XX			
AC	ABA97402;		
XX			
DT	18-JUN-2002	(first entry)	
XX			
DE	Nucleotide sequence of oligomer # 1 used to test thermal stability.		
XX			
KW	Protein nucleic acid molecule; PNA; ds.		
XX			
OS	Synthetic.		
XX			
PN	WO200168673-A1.		
XX			
PD	20-SEP-2001.		
XX			
PF	13-MAR-2001; 2001WO-US008111.		
XX			
PR	14-MAR-2000; 2000US-0189190P.		
PR	30-NOV-2000; 2000US-0250334P.		
XX			
XX			
PA	(ACTI-) ACTIVE MOTIF.		
XX			
PI	Efimov V, Fernandez J, Archdeacon D, Archdeacon J;		
PI	Chakhmakheau O, Buryakova A, Choob M, Hondorp K;		
XX	WPI; 2002-041177/05.		
XX			
PT	Oligonucleotides analogs useful in detection, separation and purification of nucleic acid molecules, comprise monomers, dimers and oligomers.		
PT			
PS	Example 17; Page 118; 197pp; English.		
XX			
CC	This invention relates to oligonucleotide analogues comprising a protein nucleic acid molecule (PNA) monomer. They are used in the detection and separation of nucleic acid molecules and as probes, primers, linkers, adaptors and antisense agents on solid supports. Modifications enhance their use as capture and detection probes e.g. by the incorporation of biotin, digoxigenin, radioisotopes, fluorescent labels such as fluorescein and reporter molecules such as alkaline phosphatase. They are also used for enhancing or inhibiting the activity of an enzyme or cellular activity. The compounds are stable to nucleases and proteases, have high affinity, binding specificity and solubility. The polyamide backbone of PNAs is resistant to both nucleases and proteases. PNAs bind nucleic acid molecules with greater affinity than DNA or RNA concentration. The compounds are relatively simple to synthesize and are used in a wide variety of applications. This sequence represents a DNA oligomer which is used to represent the thermal stability of the oligomers of the invention		
XX			
SQ	Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;		
Query Match 0.6%; Score 16; DB 1; Length 16;			
Best Local Similarity 100.0%; Pred. No. 1.1e+03;			
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
Qy	2709	AAAAAAAAAAAAAAAAA	2724
Db	16	AAAAAAAAAAAAAAAAA	1
RESULT 1433			
AAD56451/c			
ID	AAD56451	standard; DNA; 16 BP.	
XX			

DT 06-MAR-2003 (first entry)
 XX
 DE Oligo-homodeoxyribonucleotide sequence, oligo dT.
 XX
 KW Detection; single-stranded sensor; detectable fluorescence emission;
 KW forensic testing; paternity testing; tissue typing; hereditary disorder;
 KW human population genetics; human evolutionary history; cystic fibrosis;
 KW human haplotype diversity; Tay-Sachs; sickle-cell anaemia; ss.
 XX
 OS Unidentified.
 XX
 PN WO200284271-A2.
 XX
 XX 24-OCT-2002.
 XX
 PF 16-APR-2002; 2002WO-US012176.
 XX
 PR 16-APR-2001; 2001US-00836579.
 XX
 PA (REGC) UNIV CALIFORNIA.
 PA (CHAJ/) CHA J N.
 XX
 PI Cha JN, Morze DE, Stucky GD;
 XX
 XX WPI; 2003-103378/09.
 DR
 XX
 PT Detecting polynucleotides, for pharmacogenetic testing, comprises
 PT contacting a target polynucleotide with a complementary single-stranded
 PT sensor polynucleotide and an agent that allows the sensor to fluoresce
 PT upon excitation.
 XX
 XX Example 1; Page 25; 41pp; English.
 PS
 XX
 CC The invention relates to a novel assay for detecting a polynucleotide in
 CC a sample, which comprises: contacting a sample suspected of containing a
 CC target polynucleotide with a predetermined single-stranded sensor
 CC polynucleotide complementary to the target polynucleotide, in a solution
 CC comprising an agent that is a nonaqueous solvent that allows the sensor
 CC polynucleotide to produce a detectable fluorescence emission; exciting
 CC the sensor polynucleotide; and determining fluorescence emission. The
 CC assay is useful for detecting a single or double-stranded target
 CC polynucleotide, such as, DNA or RNA in a sample. The assay finds use in a
 CC wide variety of different applications including pharmacogenetic testing,
 CC forensic testing to identify the species or individual which was the
 CC source of a forensic specimen, in anthropological setting, paternity
 CC testing, testing for compatibility between prospective tissue or blood
 CC donors and patients and in screening for hereditary disorders. The method
 CC is also useful to study alterations of gene expression in response to a
 CC stimulus, disease, drug or medication, and other applications include
 CC human population genetics, analyses of human evolutionary history and
 CC characterisation of human haplotype diversity. The method is useful for
 CC detecting polynucleotide sequences from contaminants or pathogens
 CC including bacteria, yeast, and viruses to detect single nucleotide
 CC polymorphisms, which may be associated with particular alleles or subsets
 CC of alleles. The method is useful for detection of mutations and to detect
 CC nucleotide sequences associated with increased risk of diseases or
 CC disorders including cystic fibrosis, Tay-Sachs, and sickle-cell anaemia.
 CC This polynucleotide sequence represents an oligonucleotide sequence used
 CC in a fluorescence technique of the invention
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1435
 ADB68519/c

ID ADB68519 standard; DNA; 16 BP.
 XX
 AC ADB68519;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE DNA hybridisation oligomer SEQ ID 9.
 XX
 KW hydroxyproline nucleic acid; HypNA; PNA; peptide nucleic acid;
 KW gene expression; respiration; secretion; signalling;
 KW ion-channel activity; cell motility; developmental phenotype;
 KW tumour regression; hybridisation; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_difference 1 /*tag= a
 FT /note= "Optional N-terminal acetyl"
 FT
 XX
 PN WO2003068798-A2.
 XX
 PD 21-AUG-2003.
 XX
 PF 07-FEB-2003; 2003WO-US003904.
 XX
 PR 09-FEB-2002; 2002US-00072975.
 XX
 PA (ACTI-) ACTIVE MOTIF.
 XX
 PI Bfimov V, Fernandez J, Archdeacon D, Archdeacon J, Choob M;
 XX
 XX WPI; 2003-689653/65.
 DR
 XX
 CC Method of inhibiting expression of genes or RNA transcripts, useful for
 CC therapy and determining effects of genes, by administering oligomers
 CC containing hydroxyproline nucleic acid.
 PT
 XX
 XX Example 17; Page 233; 240pp; English.
 PS
 XX
 CC The invention relates to a novel method of inhibiting the expression of
 CC one or more genes or RNA transcripts by administering at least one
 CC oligonucleotide analogue that includes at least one hydroxyproline
 CC nucleic acid (HypNA) monomer to a cell or organism or their extracts. Thr
 CC oligonucleotides of the invention may be used to monitor properties
 CC including gene expression, respiration, secretion, signalling, ion-
 CC channel activity, cell motility, developmental phenotype and tumour
 CC regression. Furthermore, they may be utilised to determine the effects of
 CC particular genes, as antisense or homologous recombination constructs
 CC e.g. for creating animal models of disease and finally, for increasing
 CC the activity of some enzymes, such as polymerases. The current sequence
 CC is that of the DNA hybridisation oligomer SEQ ID 9 of the invention. This
 CC sequence may also comprise a peptide nucleic acid (PNA).
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1436
 ADZ20614
 ID ADZ20614 standard; DNA; 16 BP.
 XX
 AC ADZ20614;
 XX
 DT 16-JUN-2005 (first entry)
 XX

```
DE DNA oligo #1 related to the DNA microarray.
XX
KW DNA detection; hybridization; DNA microarray; diagnosis; SNP detection;
KW pharmaceutical; forensic; ss.
XX
OS Synthetic.
XX
PN JP2003189868-A.
XX
PD 08-JUL-2003.
XX
PF 26-DEC-2001; 2001JP-00395236.
XX
PR 26-DEC-2001; 2001JP-00395236.
XX
PA (TOKE ) TOSHIBA KK.
XX
DR WPI; 2003-819452/77.
XX
PT Analyzing nucleic acid by use of medium probe consisting of sequence
PT complementary to target sequence and sequence existing in nature at low
PT probability and probe for trapping which is complementary to medium
PT probe.
XX
PS Disclosure; Page 5; 14pp; Japanese.
XX
CC This invention relates to a novel method for nucleic acid analysis.
CC Specifically, it refers to a kit for performing nucleic acid detection
CC using a chip to identify a target polynucleotide sequence. The present
CC invention provides a chip (microarray) for nucleic-acid detection that
CC significantly reduces non-specific binding produced between a test-
CC substance nucleic acid and a DNA probe. As such, this method can be used
CC to detect the existence of a target sequence in a sample and for the
CC analysis of polymorphisms, expression analyses, and presence or absence
CC of a gene expression and SNPs, micro satellite sequences. Furthermore,
CC for diagnosis of disease by analyzing disease-related genes, estimation
CC of incidence risk rate, detection of infected existence, analysis of
CC virus type etc. This DNA microarray also has applications for various
CC clinical objectives and for the inspection of food stuffs, quarantine,
CC pharmaceutical, forensic medicine, agriculture, live stock forming,
CC fishing and forestry. This oligonucleotide sequence is a used in the
CC development of the DNA microarray of the invention.
XX
SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1437
ADI34487/c
ID ADI34487 standard; DNA; 16 BP.
XX
AC ADI34487;
XX
DT 22-APR-2004 (first entry)
XX
DE Nucleotide sequence of an oligo dT16.
XX
KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
OS Synthetic.
XX
PN WO2003102243-A1.
XX
PD 11-DEC-2003.
XX
PF 30-MAY-2003; 2003WO-US017103.

DNA detection; hybridization; DNA microarray; diagnosis; SNP detection;
pharmaceutical; forensic; ss.
Synthetic.
JP2003189868-A.
08-JUL-2003.
26-DEC-2001; 2001JP-00395236.
26-DEC-2001; 2001JP-00395236.
(TOKE ) TOSHIBA KK.
WPI; 2003-819452/77.
Analyzing nucleic acid by use of medium probe consisting of sequence
complementary to target sequence and sequence existing in nature at low
probability and probe for trapping which is complementary to medium
probe.
Disclosure; Page 5; 14pp; Japanese.
This invention relates to a novel method for nucleic acid analysis.
Specifically, it refers to a kit for performing nucleic acid detection
using a chip to identify a target polynucleotide sequence. The present
invention provides a chip (microarray) for nucleic-acid detection that
significantly reduces non-specific binding produced between a test-
substance nucleic acid and a DNA probe. As such, this method can be used
to detect the existence of a target sequence in a sample and for the
analysis of polymorphisms, expression analyses, and presence or absence
of a gene expression and SNPs, micro satellite sequences. Furthermore,
for diagnosis of disease by analyzing disease-related genes, estimation
of incidence risk rate, detection of infected existence, analysis of
virus type etc. This DNA microarray also has applications for various
clinical objectives and for the inspection of food stuffs, quarantine,
pharmaceutical, forensic medicine, agriculture, live stock forming,
fishing and forestry. This oligonucleotide sequence is a used in the
development of the DNA microarray of the invention.
Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1437
ADI34487/c
ID ADI34487 standard; DNA; 16 BP.
XX
AC ADI34487;
XX
DT 22-APR-2004 (first entry)
XX
DE Nucleotide sequence of an oligo dT16.
XX
KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
OS Synthetic.
XX
PN WO2003102243-A1.
XX
PD 11-DEC-2003.
XX
PF 30-MAY-2003; 2003WO-US017103.
```

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XX 31-MAY-2002; 2002US-0384454P.
XX (JANC ) JANSSEN PHARM NV.
XX Kamme FC, Zhu JY;
XX WPI; 2004-035466/03.
XX
XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
XX RNA transcription from a polynucleotide template, comprises eliminating
XX single-stranded oligonucleotide from the transcription sample.
XX
XX Example 1; SEQ ID NO 6; 26pp; English.
XX
XX The invention relates to amplifying for RNA in a sample comprises
XX eliminating single-stranded oligonucleotide from the transcription
XX sample. The method involves synthesizing single-stranded cDNA by
XX incubating the sample RNA with reverse transcriptase and an
XX oligonucleotide primer that primes synthesis in a direction toward 5' end
XX of the RNA; converting the single-stranded cDNA into double-stranded cDNA
XX to form a transcription sample containing a cDNA template; eliminating
XX single-stranded oligonucleotide from the transcription sample; and
XX transcribing the cDNA template into RNA using an RNA polymerase. The
XX method is useful for improving RNA polymerase based RNA transcription
XX from a polynucleotide template. The method inhibits the undesired non-
XX template derived production of RNA in the transcription reaction.
XX Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
XX transcription reaction.
XX
XX Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1438
AEB77257
ID AEB77257 standard; DNA; 16 BP.
XX
AC AEB77257;
XX
DT 20-OCT-2005 (first entry)
XX
DE Oligo, SEQ ID NO: 1, to make full-length coding sequence cDNA libraries.
XX DNA library; ss.
XX Unidentified.
XX
XX US2005175993-A1.
XX
XX 11-AUG-2005.
XX
XX 12-APR-2002; 2002US-00121641.
XX
XX 12-APR-2002; 2002US-00121641.
XX (WEIC/) WEI C.
XX Wei C;
XX
XX WPI; 2005-541755/55.
XX
XX Making full-length coding sequence cDNA libraries for research purposes
XX comprises binding a tag molecule (e.g. biotin or avidin) to a diol
XX structure present in the 5' cap site of an mRNA forming an RNA-DNA
XX hybrid.
```

XX Disclosure; SEQ ID NO 1; 13pp; English.

XX The present invention relates to a method for making cDNA libraries

XX wherein the cDNA inserts comprise the full-length of the coding sequences

XX but having lengths less than the full-length of the mRNA. The method of

XX the invention comprises binding a tag molecule to a diol structure

XX present in the 5' Cap sites of mRNAs, forming RNA-DNA hybrids by reverse

XX transcription to synthesize the first cDNA strand, separating RNA-DNA

XX hybrids carrying a DNA corresponding to full-length of mRNAs from RNA-DNA

XX hybrids formed above by using a function of the tag molecule and

XX synthesizing the second cDNA strand by self-priming the first cDNA

XX strand. The resulting cDNA libraries do not contain the full-length of

XX the mRNAs but do contain the full-length of the coding sequences of the

XX mRNAs. The invention is useful for making or constructing full-length

XX coding sequence cDNA libraries which may be utilized in researches in the

XX fields of medical science and biology. The present sequence is an

XX oligonucleotide used in making full-length coding sequences cDNA

XX libraries.

XX Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724

Db 1 AAAAAAAAAAAAAAAAAA 16

RESULT 1439

AEC34066/c

ID AEC34066 standard; DNA; 16 BP.

XX AEC34066;

XX

XX 03-NOV-2005 (first entry)

XX

XX Zea mays ZmRSPTP1 associated oligonucleotide #9.

DE

XX drought resistance; crop improvement; ZmRSPTP1; ss.

XX

XX Unidentified.

XX

XX CN1584034-A.

PN

XX

XX 23-FEB-2005.

PD

XX

XX 21-AUG-2003; 2003CN-00153941.

PF

XX

XX 21-AUG-2003; 2003CN-00153941.

PR

XX

XX (BEIJ-) BEIJING AGRIC BIOTECHNOLOGY RES CENT.

PA

XX

XX Jia W, Wu Z, Huang C;

PI

XX

XX WPI; 2005-406151/42.

DR

XX

XX Corn tyrosin protein phosphatase gene and its coding protein and use.

PT

XX

XX Example 2; Page 6; 13pp; Chinese.

PS

XX

XX The invention describes a ZmRSPTP1 gene, its coding protein and use. The

CC ZmRSPTP1 gene is one of the following ribonucleotide sequence: 1) SEQ ID

CC No:1 in sequential table; 2) ribonucleotide sequence of coded SEQ ID No:2

CC protein sequence; 3) DNA sequence having 90% homology with DNA sequence

CC refined by SEQ ID No:1 in sequentialtable. It can be used to breed

CC drought-resistant plant and corn. This sequence represents an

CC oligonucleotide associated with the isolation of ZmRSPTP1.

CC

XX Sequence 16 BP; 1 A; 0 C; 0 G; 15 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2723

Db 16 TAAAAAAAAAAAAAAAAA 1

RESULT 1440

AED63168/c

ID AED63168 standard; DNA; 16 BP.

XX AED63168;

XX

XX 29-DEC-2005 (first entry)

DT

XX Family 16/15(inv(alpha.alpha)]:4 nucleotide fragment.

DE

XX gene amplification; gene mapping; gene sequencing; ss.

XX

XX Synthetic.

OS

XX

XX Key Location/Qualifiers

FH modified_base 1

FT /*tag= a

FT /mod_base= other

FT /note= '5'-phosphorylated"

FT modified_base 16

FT /*tag= b

FT /mod_base= other

FT /note= "3'-phosphorylated"

XX

PN WO2005100607-A1.

XX

XX 27-OCT-2005.

PD

XX

XX 08-APR-2005; 2005WO-US011812.

PF

XX

XX 09-APR-2004; 2004US-0563283P.

PR

XX 26-APR-2004; 2004US-0565284P.

XX

XX (UYBO-) UNIV BOSTON.

PA

XX

XX Cantor CR, Siddiqi PA;

PI

XX

XX WPI; 2005-725959/74.

DR

XX

XX

XX Determining a target nucleic sequence comprises cleaving transcript of

PT sequence in a sequence-specific manner, determining molecular weight of

PT fragments, performing fragment identity mapping and comparing the

PT observed mass.

XX

XX Example 1; SEQ ID NO 27; 92pp; English.

PS

XX

XX The invention relates to determining a target sequence of a template

CC nucleic acid. The method involves: creating a transcript of an isolated

CC template nucleic acid using polymerase enzyme and nucleosides selected

CC for sequence specific reactivity and molecular weight and oligonucleotide

CC primers; performing a cleavage reaction resulting in complete cleavage of

CC the transcript in a cleavage-specific manner into fragments using cutters

CC selected from the group consisting of enzymatic cutters, chemical

CC cutters, and their combination; analyzing the cleavage reaction products

CC to determine the molecular weights of the fragments; performing fragment

CC identity mapping using nucleotide masses and cleavage specificities of

CC the cutters to calculate the molecular weights and sequences of all

CC possible fragments that result from the second step cleavage reactions;

CC and comparing the masses observed in the third step with the fragment

CC identity mapping, where the comparison results in determination of all

CC the target sequences present in the sample. In determining a target

CC sequence of a template nucleic acid, the steps are performed at least two

CC times with different cutters, thus allowing production of overlapping

CC fragments, and compiling the overlapping fragments to produce at least

CC


```

CC one larger subsequence. The larger subsequence is the complete sequence
CC of the template. The primers are sequence specific and have a random
CC sequence. The molecular weight is determined using mass spectroscopy
CC which is matrix-assisted laser desorption/ionization time-of-flight
CC spectroscopy. The method allows de novo detection of sequences in a
CC target nucleic acid without requiring any prior sequence information.
CC Also provided is a method for determining the number of genes in a
CC nucleic acid sample. Sequences AED63145-AED63168 represent modified
CC fragments produced during fragment identity mappings for
CC 16/15(inv(alpha.alpha))]:4 family.
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match          0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1441
AED63150
ID AED63150 standard; DNA; 16 BP.
XX
AC AED63150;
XX
DT 29-DEC-2005 (first entry)
XX
DE Family 16/15(inv(alpha.alpha))]:4 nucleotide fragment.
XX
KW gene amplification; gene mapping; gene sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= other
FT /*note= "5'-phosphorylated"
FT modified_base 16 /*tag= b
FT /*mod_base= other
FT /*note= "3'-phosphorylated"
XX
PN WO2005100607-A1.
XX
PD 27-OCT-2005.
XX
PF 08-APR-2005; 2005WO-US011812.
XX
PR 09-APR-2004; 2004US-0563283P.
PR 26-APR-2004; 2004US-0565284P.
XX
PA (UYBO-) UNIV BOSTON.
XX
PI Cantor CR, Siddiqi FA;
XX
DR WPI; 2005-725959/74.
XX
PT Determining a target nucleic sequence comprises cleaving transcript of
PT sequence in a sequence-specific manner, determining molecular weight of
PT fragments, performing fragment identity mapping and comparing the
PT observed mass.
XX
PS Example 1; SEQ ID NO 9; 92pp; English.
XX
CC The invention relates to determining a target sequence of a template
CC nucleic acid. The method involves: creating a transcript of an isolated
CC template nucleic acid using polymerase enzyme and nucleosides selected
CC for sequence specific reactivity and molecular weight and oligonucleotide
CC primers; performing a cleavage reaction resulting in complete cleavage of

```

```

CC the transcript in a sequence-specific manner into fragments using cutters
CC selected from the group consisting of enzymatic cutters, chemical
CC cutters, and their combination; analyzing the cleavage reaction products
CC to determine the molecular weights of the fragments; performing fragment
CC identity mapping using nucleotide masses and cleavage specificities of
CC the cutters to calculate the molecular weights and sequences of all
CC possible fragments that result from the second step cleavage reactions;
CC and comparing the masses observed in the third step with the fragment
CC identity mapping, where the comparison results in determination of all
CC the target sequences present in the sample. In determining a target
CC sequence of a template nucleic acid, the steps are performed at least two
CC times with different cutters, thus allowing production of overlapping
CC fragments, and compiling the overlapping fragments to produce at least
CC one larger subsequence. The larger subsequence is the complete sequence
CC of the template. The primers are sequence specific and have a random
CC sequence. The molecular weight is determined using mass spectroscopy
CC which is matrix-assisted laser desorption/ionization time-of-flight
CC spectroscopy. The method allows de novo detection of sequences in a
CC target nucleic acid without requiring any prior sequence information.
CC Also provided is a method for determining the number of genes in a
CC nucleic acid sample. Sequences AED63145-AED63168 represent modified
CC fragments produced during fragment identity mappings for
CC 16/15(inv(alpha.alpha))]:4 family.
XX
SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1442
AAAG69800/C
ID AAAG69800 standard; RNA; 17 BP.
XX
AC AAAG69800;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1095.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW XDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, McSwiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX

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PS Claim 4; Page 79; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 0 A; 1 C; 0 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
 DB 17 AAAAAAAAAAAAAA 2

RESULT 1443

AAV69801/c
 ID AAX69801 standard; RNA; 17 BP.

XX AAX69801;

XX 28-JUL-1999 (first entry)

DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1096.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.

XX Homo sapiens.

PN WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

XX 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

XX (CHIR) CHIRON CORP.

PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 79; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 0 A; 1 C; 0 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
 DB 16 AAAAAAAAAAAAAA 1

RESULT 1444

AAV49503/c
 ID AAV49503 standard; cDNA to mRNA; 17 BP.

XX AAV49503;

XX 18-NOV-1998 (first entry)

DE Human eosinophil cell activator HVC002 primer #1.

XX Eosinophil cell activator; treatment; diagnosis; malignant tumour;
 KW parasitic infection; allergic inflammation; eosinophilic pneumonia;
 KW rapid onset eosinophilia; autoimmune disease; gene therapy; primer; ss.

XX Synthetic.

XX Homo sapiens.

PN WO9824817-A1.

XX 11-JUN-1998.

XX 05-DEC-1997; 97WO-JP004470.

XX 05-DEC-1996; 96JP-00325762.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX Yoshisue H, Saito A, Nakagawa S, Kuga T, Shinkai A, Koike M;

PI Nishi T;

XX WPI; 1998-333261/29.

XX DNA and encoded protein which activates eosinophil cells - for treatment
 PT of cancer, parasite infection, autoimmune disease and allergic
 PT inflammation.

XX Example 1; Page 64; 92pp; Japanese.

XX AAV49503-V49507 are primers used in the isolation of a human eosinophil
 CC cell activator. This protein and antibodies generated from the protein
 CC can be used for treatment and diagnosis of malignant tumours, parasitic
 CC infections, allergic inflammation, eosinophilic pneumonia, rapid onset
 CC eosinophilia, and autoimmune diseases. DNA can be used for diagnosis, and
 CC the antisense DNA in gene therapy of these disorders. The protein can be
 CC used for screening of potential agonists or antagonists of its activity

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 DB 17 TAAAAAAAAAAAAA 2

RESULT 1445

AAV18371/c
 ID AAX18371 standard; DNA; 17 BP.

```

XX AC AAX18371;
XX DT 11-MAY-1999 (first entry)
XX DE RT-PCR primer of the invention SEQ ID 12.
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX OS Synthetic.
XX PN JPI1032765-A.
XX FD 09-FEB-1999.
XX PF 18-JUL-1997; 97JP-00208312.
XX PR 18-JUL-1997; 97JP-00208312.
XX PA (TAKI ) TAKARA SHUZO CO LTD.
XX DR WPI; 1999-183822/16.
XX PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.
XX PS Disclosure; Page 11; 19pp; Japanese.
XX CC This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
XX SQ Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 16 TAAAAAAAAAAAAAAAAA 1

RESULT 1446
AAX18370/C
ID AAX18370 standard; DNA; 17 BP.
XX AC AAX18370;
XX DT 11-MAY-1999 (first entry)
XX DE RT-PCR primer of the invention SEQ ID 11.
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX OS Synthetic.
XX PN JPI1032765-A.
XX FD 09-FEB-1999.
XX PF 18-JUL-1997; 97JP-00208312.
XX PR 18-JUL-1997; 97JP-00208312.

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XX PA (TAKI ) TAKARA SHUZO CO LTD.
XX DR WPI; 1999-183822/16.
XX PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.
XX PS Disclosure; Page 11; 19pp; Japanese.
XX CC This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
XX SQ Sequence 17 BP; 2 A; 0 C; 0 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 16 TAAAAAAAAAAAAAAAAA 1

RESULT 1447
AAX30179/C
ID AAX30179 standard; DNA; 17 BP.
XX AC AAX30179;
XX DT 16-AUG-2000 (first entry)
XX DE PCR primer GT15A used in pollenosis associated gene identification.
XX KW Pollenosis-associated protein; high pollen-specific immunoglobulin E; IGE; diagnose; cedar pollenosis; treatment; human; PCR primer; ss.
XX OS Synthetic.
XX PN WO200020575-A1.
XX PD 13-APR-2000.
XX PF 06-OCT-1999; 99WO-JP005506.
XX PR 06-OCT-1998; 98JP-00284610.
XX PA (GENO-) GENOX RES INC.
XX PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S; Obayashi I, Imai Y, Lu N, Ogawa K;
XX DR WPI; 2000-317712/27.
XX PT Gene highly expressed in patients with high cedar pollen-specific IGE levels, useful for diagnosing pollenosis, and screening candidate compounds for pollenosis treatment.
XX PS Example 6; Page 38; 44pp; Japanese.
XX CC This sequence represents a PCR primer used in the identification of a human pollenosis associated gene. The gene is highly expressed in individuals with high pollen-specific immunoglobulin E (IGE) levels. The

```

CC invention relates to the nucleotide sequence encoding the pollenosis
 CC associated protein, diagnosing pollenosis and screening candidate
 CC compounds for treating pollenosis. The gene can be used in diagnosing
 CC pollenosis, particularly cedar pollenosis, and screening candidate
 CC compounds for pollenosis treatment

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1448

AAX82720/C

ID AAX82720 standard; DNA; 17 BP.

XX AAX82720;

AC 10-NOV-2000 (first entry)

XX Human IGA nephropathy-associated cDNA primer #61.

DE IGA nephropathy-associated protein; diagnosis; treatment; antisense;
 XX human; primer; ss.

XX Homo sapiens.

XX WO963085-A1.

XX 09-DEC-1999.

XX 28-MAY-1999; 99WO-JP002855.

XX 02-JUN-1998; 98JP-00152603.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX Ishiwata T, Sakurada M, Kawabata A, Nakagawa S, Nishi T, Kuga T;
 PI Sawada S, Takei M, Shibata K, Furuya A;

XX WPI; 2000-097328/08.

XX DNA sequences preferentially expressed in IGA nephropathy patients,
 PT proteins encoded by them, and antibodies to those proteins.

XX Claim 3; Page 169; 180pp; Japanese.

XX This invention describes novel DNA sequences preferentially expressed in
 CC IGA nephropathy patients, and DNA sequences stringently hybridizing to
 CC them. Independent claims cover diagnostic reagents for IGA nephropathy
 CC incorporating the antisense sequences; the treatment of IGA nephropathy
 CC using the antisense sequences for mRNA inhibition; proteins associated
 CC with IGA nephropathy, containing sequences encoded by the DNA sequences;
 CC antibodies recognizing these proteins; the production of the proteins by
 CC culture of host cells transformed with DNA encoding them; diagnostic
 CC reagents for IGA nephropathy containing the antibodies; and compositions
 CC for the treatment of IGA nephropathy which contain the antibodies. The
 CC products of the invention can be used for the diagnosis and treatment of
 CC IGA nephropathy. This sequence represents a primer used in the isolation
 CC and identification of the human IGA nephropathy-associated proteins
 CC described in the method of the invention

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1449

AAX36739/C

ID AAX36739 standard; DNA; 17 BP.

XX AAX36739;

XX 13-MAR-2000 (first entry)

XX Anchored oligo(dT) primer AT15A used for modified differential display.

DE Stimulus-regulated nucleic acid; sequence profile; nucleic acid level;
 XX differentially expressed nucleic acid; disease state; cancer;
 KW autoimmune disease; infectious disease; aging; developmental disorder;
 KW proliferative disorder; neurological disorder; toxicity; primer;
 KW treatment resistance; differential expression; drug discovery;
 KW growth factor; epidermal growth factor; radiation; stress; pathogen; ss.

XX Synthetic.

XX WO955913-A2.

XX 04-NOV-1999.

XX 27-APR-1999; 99WO-US009119.

XX 27-APR-1998; 98US-0083331P.

XX 27-AUG-1998; 98US-0098070P.

XX 04-FEB-1999; 99US-0118624P.

XX (KIMW-) KIMMEL CANCER CENT SIDNEY.

XX McClelland M, Welsh J, Trenkle T;

XX WPI; 2000-086388/07.

XX Measuring expression of low abundance reduced complexity target nucleic
 PT acid molecules.

XX Example 3; Page 91; 187pp; English.

XX AAX36739-41 represent oligo(dT) primers used for modified differential
 CC display, in the method of the invention. The specification describes a
 CC method for measuring the level of two or more nucleic acid molecules in a
 CC target. The method comprises contacting a probe with an arbitrarily or
 CC statistically sampled target and detecting the amount of specific binding
 CC of the target to the probe. The methods can be used to identify
 CC differentially expressed nucleic acid molecules associated with disease
 CC states, such as cancer, autoimmune disease, infectious disease, aging,
 CC developmental disorder, proliferative disorder or neurological disorder.
 CC Alternatively the methods can be used to assess the efficacy or toxicity
 CC of or a resistance to a treatment. Also the methods can be used to
 CC determine differential expression of nucleic acid molecules in response
 CC to a stimulus, e.g. a chemical, drug or growth factor (especially
 CC epidermal growth factor), radiation, stress or a pathogen. The methods
 CC can also be used to determine co-regulated genes that can be potential
 CC targets for drug discovery

XX Sequence 17 BP; 2 A; 0 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1450
 ID AAA25449 standard; DNA; 17 BP.
 AC
 XX
 XX
 XX
 XX
 XX
 19-JUL-2000 (first entry)
 DE
 XX
 XX
 Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1947.
 DE
 XX
 XX
 Oestrogen receptor; c-ras; k-ras; bcl-2; ribozyme; cleavage;
 KW
 XX
 hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW
 XX
 gene expression modification; cancer; phosphorothioate; endonuclease;
 KW
 XX
 anticancer; breast cancer; endometrium cancer; ss.
 KW
 XX
 Homo sapiens.
 OS
 XX
 WO9954459-A2.
 PN
 XX
 28-OCT-1999.
 PD
 XX
 19-APR-1999; 99WO-US008547.
 PF
 XX
 20-APR-1998; 98US-0082404P.
 PR
 XX
 23-JUN-1998; 98US-00103636.
 PR
 XX
 (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 Thompson JD, Beigelman L, McSwiggen JA, Karpeisky A, Bellon L;
 PI
 XX
 Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
 PI
 XX
 Matulic-Adamic J;
 PI
 XX
 WPI; 2000-013248/01.
 DR
 XX
 New nucleic acids that interact, and optionally cleave, target sequences,
 PT
 XX
 used to treat cancer.
 PT
 XX
 Claim 77; Page 79; 148pp; English.
 PS
 XX
 The present invention describes nucleic acids (A) that interact stably
 CC
 XX
 with a target sequence and contain at least one phosphorodithioate
 CC
 XX
 link, having endonuclease activity. (A), and more generally any catalytic
 CC
 XX
 nucleic acid (A') that modulates expression of the oestrogen receptor
 CC
 XX
 gene, are used to treat cancer (particularly of breast or endometrium),
 CC
 XX
 in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC
 XX
 for other conditions associated with levels of oestrogen receptor.
 CC
 XX
 Because of the high selectivity for targeted RNA, (A) can also be used to
 CC
 XX
 correlate inhibition of gene expression with alterations in phenotype,
 CC
 XX
 particularly for identification of therapeutic targets, and as research
 CC
 XX
 reagents (for RNA, in the same way that restriction endonucleases are
 CC
 XX
 used with DNA). The combination of modifications in (A) improves
 CC
 XX
 resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC
 XX
 AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC
 XX
 AAA24748 to AAA25992 represent their corresponding target sequences.
 CC
 XX
 AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC
 XX
 sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC
 XX
 sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC
 XX
 antisense oligonucleotides used in the exemplification of the present
 CC
 XX
 invention
 CC
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 17 AAAAAAAAAAAAAA 2
 RESULT 1451
 ID AAA25451/c
 AC
 XX
 XX
 XX
 XX
 19-JUL-2000 (first entry)
 DE
 XX
 XX
 Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1949.
 DE
 XX
 XX
 Oestrogen receptor; c-ras; k-ras; bcl-2; ribozyme; cleavage;
 KW
 XX
 hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW
 XX
 gene expression modification; cancer; phosphorothioate; endonuclease;
 KW
 XX
 anticancer; breast cancer; endometrium cancer; ss.
 KW
 XX
 Homo sapiens.
 OS
 XX
 WO9954459-A2.
 PN
 XX
 28-OCT-1999.
 PD
 XX
 19-APR-1999; 99WO-US008547.
 PF
 XX
 20-APR-1998; 98US-0082404P.
 PR
 XX
 23-JUN-1998; 98US-00103636.
 PR
 XX
 (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 Thompson JD, Beigelman L, McSwiggen JA, Karpeisky A, Bellon L;
 PI
 XX
 Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
 PI
 XX
 Matulic-Adamic J;
 PI
 XX
 WPI; 2000-013248/01.
 DR
 XX
 New nucleic acids that interact, and optionally cleave, target sequences,
 PT
 XX
 used to treat cancer.
 PT
 XX
 Claim 77; Page 79; 148pp; English.
 PS
 XX
 The present invention describes nucleic acids (A) that interact stably
 CC
 XX
 with a target sequence and contain at least one phosphorodithioate
 CC
 XX
 link, having endonuclease activity. (A), and more generally any catalytic
 CC
 XX
 nucleic acid (A') that modulates expression of the oestrogen receptor
 CC
 XX
 gene, are used to treat cancer (particularly of breast or endometrium),
 CC
 XX
 in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC
 XX
 for other conditions associated with levels of oestrogen receptor.
 CC
 XX
 Because of the high selectivity for targeted RNA, (A) can also be used to
 CC
 XX
 correlate inhibition of gene expression with alterations in phenotype,
 CC
 XX
 particularly for identification of therapeutic targets, and as research
 CC
 XX
 reagents (for RNA, in the same way that restriction endonucleases are
 CC
 XX
 used with DNA). The combination of modifications in (A) improves
 CC
 XX
 resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC
 XX
 AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC
 XX
 AAA24748 to AAA25992 represent their corresponding target sequences.
 CC
 XX
 AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC
 XX
 sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC
 XX
 sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC
 XX
 antisense oligonucleotides used in the exemplification of the present
 CC
 XX
 invention
 CC
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 17 AAAAAAAAAAAAAA 2
 RESULT 1452
 ID AAC64202/c
 AC
 XX
 XX
 XX
 XX
 19-JUL-2000 (first entry)
 DE
 XX
 XX
 Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1947.
 DE
 XX
 XX
 Oestrogen receptor; c-ras; k-ras; bcl-2; ribozyme; cleavage;
 KW
 XX
 hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW
 XX
 gene expression modification; cancer; phosphorothioate; endonuclease;
 KW
 XX
 anticancer; breast cancer; endometrium cancer; ss.
 KW
 XX
 Homo sapiens.
 OS
 XX
 WO9954459-A2.
 PN
 XX
 28-OCT-1999.
 PD
 XX
 19-APR-1999; 99WO-US008547.
 PF
 XX
 20-APR-1998; 98US-0082404P.
 PR
 XX
 23-JUN-1998; 98US-00103636.
 PR
 XX
 (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 Thompson JD, Beigelman L, McSwiggen JA, Karpeisky A, Bellon L;
 PI
 XX
 Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
 PI
 XX
 Matulic-Adamic J;
 PI
 XX
 WPI; 2000-013248/01.
 DR
 XX
 New nucleic acids that interact, and optionally cleave, target sequences,
 PT
 XX
 used to treat cancer.
 PT
 XX
 Claim 77; Page 79; 148pp; English.
 PS
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 The present invention describes nucleic acids (A) that interact stably
 CC
 XX
 with a target sequence and contain at least one phosphorodithioate
 CC
 XX
 link, having endonuclease activity. (A), and more generally any catalytic
 CC
 XX
 nucleic acid (A') that modulates expression of the oestrogen receptor
 CC
 XX
 gene, are used to treat cancer (particularly of breast or endometrium),
 CC
 XX
 in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC
 XX
 for other conditions associated with levels of oestrogen receptor.
 CC
 XX
 Because of the high selectivity for targeted RNA, (A) can also be used to
 CC
 XX
 correlate inhibition of gene expression with alterations in phenotype,
 CC
 XX
 particularly for identification of therapeutic targets, and as research
 CC
 XX
 reagents (for RNA, in the same way that restriction endonucleases are
 CC
 XX
 used with DNA). The combination of modifications in (A) improves
 CC
 XX
 resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC
 XX
 AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC
 XX
 AAA24748 to AAA25992 represent their corresponding target sequences.
 CC
 XX
 AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC
 XX
 sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC
 XX
 sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC
 XX
 antisense oligonucle

```

AC AAC64202;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:3, used in human gene 373 isolation.
XX
XX Human; pollinosis-associated gene 373; IgE; immunoglobulin E;
XX cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
XX drug screening; allergic disease; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200065046-A1.
XX
XX 02-NOV-2000.
XX
XX 26-APR-2000; 2000WO-JP002730.
XX
XX 27-APR-1999; 99JP-00120489.
XX
XX (GENO-) GENOX RES INC.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
XX Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
XX WPI; 2000-687339/67.
XX
XX Pollinosis-associated gene 373 undergoing significantly low expression in
XX subjects with high cedar pollen-specific immunoglobulin-E levels, useful
XX in diagnosis of allergic diseases and screening drug candidates.
XX
XX Example 6; Page 69; 80pp; Japanese.
XX
XX The invention relates to the human pollinosis-associated gene 373 which
XX exhibits significantly reduced expression in the T-cells of individuals
XX with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
XX was isolated from T-cells from individuals allergic to cedar pollen using
XX the differential display method. The invention also relates also relates
XX to the protein encoded by pollinosis gene 373; expression constructs and
XX host cells comprising pollinosis-associated gene 373 nucleic acids;
XX pollinosis-associated gene 373 primers and probes; antibodies against the
XX protein encoded by the gene; methods of detection of pollinosis-
XX associated gene 373 nucleic acids; and a method of diagnosis of allergic
XX diseases via the detection of pollinosis-associated gene 373 nucleic
XX acids. The invention additionally encompasses methods of screening drug
XX candidates for the treatment of allergic disease by measuring the
XX expression of pollinosis-associated gene 373 in pollen antigen-stimulated
XX T-cells in the presence of a test compound relative to a control.
XX Pollinosis-associated gene 373 is useful in the diagnosis of allergic
XX diseases and in the screening of drug candidates for the treatment of
XX such diseases. The present sequence represents a PCR primer used in the
XX isolation of human pollinosis-associated gene 373 cDNA
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2708 TAAAAAATAAAAA 2723
XX
XX Db
XX
XX RESULT 1453
XX AAC64181/C
XX ID AAC64181 standard; DNA; 17 BP.
XX
XX AAC64181;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:2, used in human gene 419 isolation.
XX

```

```

XX
XX Human; pollinosis-associated gene 419; FAF-1 homologue;
XX Fas-associated factor-1; IgE; immunoglobulin E; cedar pollen allergy;
XX T-cell; reduced expression; detection; diagnosis; drug screening;
XX allergic disease; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200065045-A1.
XX
XX 02-NOV-2000.
XX
XX 26-APR-2000; 2000WO-JP002729.
XX
XX 27-APR-1999; 99JP-00120490.
XX
XX (GENO-) GENOX RES INC.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
XX Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
XX WPI; 2000-687338/67.
XX
XX Pollinosis-associated gene 419 undergoing significantly low expression in
XX subjects with high cedar pollen-specific IgE levels, useful in diagnosis
XX of allergic diseases and screening drug candidates.
XX
XX Example 6; Page 49; 77pp; Japanese.
XX
XX The invention relates to the human pollinosis-associated gene 419 which
XX exhibits reduced expression in the T-cells of individuals with high cedar
XX pollen-specific IgE (immunoglobulin E) levels. The gene was isolated from
XX T-cells from individuals allergic to cedar pollen using the differential
XX display method. Pollinosis-associated gene 419 has homology with the gene
XX encoding human Fas-associated factor-1 (FAF-1). The invention also
XX relates to the protein encoded by pollinosis gene 419; expression
XX constructs and host cells comprising pollinosis- associated gene 419
XX nucleic acids; pollinosis-associated gene 419 primers and probes;
XX antibodies against the protein encoded by the gene; methods of detection
XX of pollinosis-associated gene 419 nucleic acids; and a method of
XX diagnosis of allergic diseases via the detection of pollinosis-
XX associated gene 419 nucleic acids. The invention additionally encompasses
XX methods of screening drug candidates for the treatment of allergic
XX disease by measuring the expression of pollinosis-associated gene 419 in
XX pollen antigen-stimulated T-cells in the presence of a test compound
XX relative to a control. Pollinosis-associated gene 419 is useful in the
XX diagnosis of allergic diseases and in the screening of drug candidates
XX for the treatment of such diseases. The present sequence represents a PCR
XX primer used in the isolation of human pollinosis-associated gene 419 cDNA
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2708 TAAAAAATAAAAA 2723
XX
XX Db
XX
XX RESULT 1454
XX AAC64171/C
XX ID AAC64171 standard; DNA; 17 BP.
XX
XX AAC64171;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:2, used in human gene 513 isolation.
XX
XX Human; pollinosis-associated gene 513; IgE; immunoglobulin E;
XX cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
XX

```

KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065049-A1.

PN 02-NOV-2000.

PD 26-APR-2000; 2000WO-JP002733.

XX 27-APR-1999; 99JP-00120491.

PA (GENO-) GENOX RES INC.

XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;

XX WPI; 2000-687342/67.

XX Pollinosis-associated gene 513 undergoing significantly low expression in
PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT of allergic diseases and screening drug candidates.

XX Example 6; Page 38; 46pp; Japanese.

XX The invention relates to the human pollinosis-associated gene 513 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. The invention also relates to methods of
CC detection of pollinosis-associated gene 513 nucleic acids; a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 513 nucleic acids; and methods of screening drug candidates for the
CC treatment of allergic disease by measuring the expression of pollinosis-
CC associated gene 513 in pollen antigen-stimulated T-cells in the presence
CC of a test compound relative to a control. Pollinosis-associated gene 513
CC is useful in the diagnosis of allergic diseases and in the screening of
CC drug candidates for the treatment of such diseases. The present sequence
CC represents a PCR primer used in the isolation of human pollinosis-
CC associated gene 513 cDNA

SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723

Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1455

AAC64161/c

ID AAC64161 standard; DNA; 17 BP.

XX AAC64161;

XX 21-FEB-2001 (first entry)

XX PCR anchor primer, SEQ ID NO:2, used in human gene 581 isolation.

XX Human; pollinosis-associated gene 581; IgE; immunoglobulin E;
KW cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065048-A1.

XX 02-NOV-2000.

XX 26-APR-2000; 2000WO-JP002732.

XX

PR 27-APR-1999; 99JP-00120492.

XX (GENO-) GENOX RES INC.

XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;

XX WPI; 2000-687341/67.

XX Pollenosis-associated gene 581 undergoing significantly low expression in
PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT of allergic diseases and screening drug candidates.

XX Example 6; Page 39; 69pp; Japanese.

XX The invention relates to the human pollinosis-associated gene 581 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. The invention also relates also relates
CC to the protein encoded by pollinosis-associated gene 581; to expression
CC constructs and host cells comprising pollinosis-associated gene 581
CC nucleic acids; pollinosis-associated gene 581 primers and probes;
CC antibodies against the protein encoded by the gene; methods of detection
CC of pollinosis-associated gene 581 nucleic acids; and a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 581 nucleic acids. The invention additionally encompasses methods of
CC screening drug candidates for the treatment of allergic disease by
CC measuring the expression of pollinosis-associated gene 581 in pollen
CC antigen-stimulated T-cells in the presence of a test compound relative to
CC a control. Pollinosis-associated gene 581 is useful in the diagnosis of
CC allergic diseases and in the screening of drug candidates for the
CC treatment of such diseases. The present sequence represents a PCR primer
CC used in the isolation of human pollinosis-associated gene 581 cDNA

SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723

Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1456

AAC64213/c

ID AAC64213 standard; DNA; 17 BP.

XX AAC64213;

XX 21-FEB-2001 (first entry)

XX PCR anchor primer, SEQ ID NO:2, used in human gene 627 isolation.

XX Human; pollinosis-associated gene 627; IgE; immunoglobulin E;
KW cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065051-A1.

XX 02-NOV-2000.

XX 26-APR-2000; 2000WO-JP002735.

XX 27-APR-1999; 99JP-00120493.

XX (GENO-) GENOX RES INC.

PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
XX WPI; 2000-687344/67.
XX
PT Pollinosis-associated gene 627 undergoing significantly low expression in
PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT of allergic diseases and screening drug candidates.
XX Example 6; Page 41; 51pp; Japanese.
PS
XX The invention relates to the human pollinosis-associated gene 627 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. The invention also relates to methods of
CC detection of pollinosis-associated gene 627 nucleic acids; a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 627 nucleic acids; and a method of screening drug candidates for the
CC treatment of allergic disease by measuring the expression of pollinosis-
CC associated gene 627 in pollen antigen-stimulated T-cells in the presence
CC of a test compound relative to a control. Pollinosis-associated gene 627
CC is useful in the diagnosis of allergic diseases and in the screening of
CC drug candidates for the treatment of such diseases. The present sequence
CC represents a PCR primer used in the isolation of human pollinosis-
CC associated gene 627 cDNA
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2708 TAAAAAATAAAAAA 2723
Db 17 TAAAAAATAAAAAA 2
RESULT 1457
AAC64230/c
ID AAC64230 standard; DNA; 17 BP.
XX
AC AAC64230;
XX
XX 21-FEB-2001 (first entry)
XX
DE PCR anchor primer, SEQ ID NO:2, used in human gene 795 isolation.
XX
XX Human; pollinosis-associated gene 795; vimentin homologue; IgE;
KW immunoglobulin E; cedar pollen allergy; T-cell; reduced expression;
KW detection; diagnosis; drug screening; allergic disease; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO200065050-A1.
XX
XX 02-NOV-2000.
XX
XX 26-APR-2000; 2000WO-JP002734.
XX
XX 27-APR-1999; 99JP-00120494.
XX
XX (GENO-) GENOX RES INC.
PA (EISA) EISAI CO LTD.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
PI Yokoi A;
XX WPI; 2000-687343/67.
XX
XX Pollinosis-associated gene 795 undergoing significantly low expression in
XX subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT
PT

PT of allergic diseases and screening drug candidates.
XX
PS Page 45; Example 6; 73pp; Japanese.
XX
CC The invention relates to the human pollinosis-associated gene 795 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. Pollinosis-associated gene 795 has
CC homology with the human vimentin gene. The invention also relates also
CC relates to the protein encoded by pollinosis gene 795; to expression
CC constructs and host cells comprising pollinosis-associated gene 795
CC nucleic acids; pollinosis-associated gene 795 primers and probes;
CC antibodies against the protein encoded by the gene; methods of detection
CC of pollinosis-associated gene 795 nucleic acids; and a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 795 nucleic acids. The invention additionally encompasses methods of
CC screening drug candidates for the treatment of allergic disease by
CC measuring the expression of pollinosis-associated gene 795 in pollen
CC antigen-stimulated T-cells in the presence of a test compound relative to
CC a control. Pollinosis-associated gene 795 is useful in the diagnosis of
CC allergic diseases and in the screening of drug candidates for the
CC treatment of such diseases. The present sequence represents a PCR primer
CC used in the isolation of human pollinosis-associated gene 795 cDNA
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2708 TAAAAAATAAAAAA 2723
Db 17 TAAAAAATAAAAAA 2
RESULT 1458
AAC92292/c
ID AAC92292 standard; DNA; 17 BP.
XX
AC AAC92292;
XX
XX 22-MAR-2001 (first entry)
XX
DE Human pollinosis-associated gene 465 related PCR primer SEQ ID NO:2.
XX
XX Human; pollinosis-associated gene 465; pollen scattering; allergy;
KW allergic disease; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200073439-A1.
PN
XX 07-DEC-2000.
XX
XX 18-MAY-2000; 2000WO-JP003191.
XX
XX 27-MAY-1999; 99JP-00148784.
XX
XX (GENO-) GENOX RES INC.
PA (EISA) EISAI CO LTD.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
PI Yokoi A;
XX WPI; 2001-061528/07.
XX
XX Pollinosis-associated gene 465 undergoing significantly low expression in
XX subjects after pollen scattering, useful in diagnosis of allergic
PT diseases and screening candidate compounds to regulate response of T
PT cells to antigen stimulus.
XX

PS Example 6; Page 43; 61pp; Japanese.

CC The present invention describes the human pollinosis-associated gene 465
 CC which has a nucleic acid sequence of 3442 base pairs (bp), given in
 CC (AAC92291), that undergoes significantly low expression in subjects after
 CC pollen scattering, and is useful in the diagnosis of allergic diseases
 CC and screening candidate compounds for remedies capable of regulating the
 CC response of T cells to the stimulus by an antigen. The gene is useful in
 CC the diagnosis of allergic diseases and screening candidate compounds for
 CC remedies capable of regulating the response of T cells to the stimulus by
 CC an antigen. The present sequence represents a PCR primer which is used in
 CC an example from the present invention

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1459
 AAC91719/c
 ID AAC91719 standard; DNA; 17 BP.

XX
 AC AAC91719;

XX
 DT 27-MAR-2001 (first entry)

XX
 DE PCR anchor primer, SEQ ID NO:2, used in human gene 787 isolation.

XX
 KW Human; pollinosis-associated gene 787; pollen allergy; T-cell;
 KW reduced expression; detection; diagnosis; drug screening;
 KW allergic disease; PCR primer; ss.

XX
 OS Synthetic.

XX
 PN WO200073440-A1.

XX
 PD 07-DEC-2000.

XX
 PF 18-MAY-2000; 2000WO-JP003192.

XX
 PR 27-MAY-1999; 99JP-00148785.

XX
 PA (GENO-) GENOX RES INC.

XX
 PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
 PI Yokoi A;

XX
 DR WPI; 2001-032159/04.

XX
 PT Pollinosis-associated gene 787 undergoing significantly low expression in
 PT subjects after pollen scattering, useful in diagnosis of allergic
 PT diseases and screening candidate compounds to regulate response of T
 PT cells to antigen stimulus.

XX
 PS Example 6; Page 40; 54pp; Japanese.

XX
 CC The invention relates to the human pollinosis-associated gene 787 which
 CC exhibits significantly reduced expression in the T-cells of individuals
 CC after the pollen-scattering season, relative to expression levels in T-
 CC cells before the pollen-scattering season. The gene was isolated from T-
 CC cells from individuals allergic to pollen using the differential display
 CC method. The invention also relates to pollinosis-associated gene 787
 CC primers and probes; methods of detection of pollinosis-associated gene
 CC 787 nucleic acids; and a method of diagnosis of allergic diseases via the
 CC detection of pollinosis-associated gene 787 nucleic acids. The invention

CC additionally encompasses a method of screening drug candidates for the
 CC treatment of allergic disease by measuring the expression of pollinosis-
 CC associated gene 787 in pollen antigen-stimulated T-cells in the presence
 CC of a test compound relative to a control. Pollinosis-associated gene 787
 CC is useful in the diagnosis of allergic diseases and in the screening of
 CC drug candidates for the treatment of such diseases. The present sequence
 CC represents a PCR primer used in the isolation of human pollinosis-
 CC associated gene 787 cDNA

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1460
 AAC82874/c
 ID AAC82874 standard; DNA; 17 BP.

XX
 AC AAC82874;

XX
 DT 20-MAR-2001 (first entry)

XX
 DE Human pollinosis-associated gene 441 primer #1.

XX
 KW Pollinosis; pollinosis-associated gene 441; allergy; T cell;
 KW pollen scattering; antigen; primer; ss.

XX
 OS Homo sapiens.

XX
 PN WO200073435-A1.

XX
 PD 07-DEC-2000.

XX
 PF 18-MAY-2000; 2000WO-JP003190.

XX
 PR 27-MAY-1999; 99JP-00148783.

XX
 PA (GENO-) GENOX RES INC.

XX
 PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K,

XX
 DR WPI; 2001-061526/07.

XX
 PT Pollinosis-associated gene 441 which undergoes lower expression in
 PT subjects after pollen scattering, useful in diagnosis of allergic
 PT diseases and screening candidate compounds to regulate response of T
 PT cells to antigen stimulus.

XX
 PS Example 6; Page 35; 42pp; Japanese.

XX
 CC This invention describes a novel nucleic acid molecule comprising a
 CC sequence (I) which undergoes significantly low expression in subjects
 CC after pollen scattering, and is useful in diagnosis of allergic diseases
 CC and screening candidate compounds for remedies capable of regulating the
 CC response of T cells to the stimulus by an antigen

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

```

RESULT 1461
AAH47126/C
ID AAH47126 standard; DNA; 17 BP.
XX
XX AAH47126;
AC
XX
XX 30-NOV-2001 (first entry)
DT
XX
XX Nucleotide sequence of primer GT15A.
DE
XX
XX B1001; B1466; B1072; B1151; T-cell; allergy; atopic dermatitis; human;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200165259-A1.
PN
XX
XX 07-SEP-2001.
PD
XX
XX 23-FEB-2001; 2001WO-JP001372.
PF
XX
XX 02-MAR-2000; 2000JP-00061832.
PR
XX
XX (GENO-) GENOX RES INC.
PA
XX (NICE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
PA
XX Nagasu T, Oshida T, Obayashi I, Matsui K, Saito H;
PI
XX WPI; 2001-557789/62.
XX
XX Diagnosis of allergies including atopic dermatitis.
XX
XX Example 6; Page 65; 83pp; Japanese.
XX
XX The invention provides a method of diagnosis of allergies that involves:
CC assaying the levels of expression of genes B1001, B1466, B1072 or B1151
CC in T-cells; and comparing them with the level of expression in healthy T-
CC cells. The method is useful for diagnosing allergies, particularly atopic
CC dermatitis. The present sequence represents a PCR primer used for
CC analysis of the expression of the above genes
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2723
Db 17 TAAAAA AAAAAAAAAA 2

RESULT 1462
ABK13941/C
ID ABK13941 standard; DNA; 17 BP.
XX
XX ABK13941;
AC
XX
XX 21-MAY-2002 (first entry)
DT
XX
XX 5'-PCR primer used to produce single pattern characteristic by FokI.
DE
XX
XX Identification of transcribed gene; mRNA profile; gene expression;
KW cellular process; fingerprinting; susceptibility to external factor;
KW development; disease; PCR; primer; ss.
XX
XX Synthetic.
OS
XX WO200208461-A2.
XX
XX 31-JAN-2002.
XX
XX

PF 23-JUL-2001; 2001WO-IB001539.
XX
XX 21-JUL-2000; 2000GB-00018016.
PR 21-JUL-2000; 2000US-0219925P.
XX
XX (GLOB-) GLOBAL GENOMICS AB.
PA
XX Linnarsson S, Ernfors P, Bauren G;
PI
XX WPI; 2002-217065/27.
DR
XX
XX Providing mRNA profile, by generating two independent patterns
PT characteristic of sample mRNA population, analyzing patterns, comparing
PT gene expression by cell types under varied conditions, and identifying
PT genes.
XX
XX Disclosure; Fig 2; 67pp; English.
XX
XX The present invention relates to a method for providing a profile of mRNA
CC molecules present in a sample. The method comprises generating two
CC independent patterns characteristic of the population of mRNA molecules
CC expressed in the sample and analysing the patterns using a combinatorial
CC algorithm, comparing gene expression by different or same cell types
CC under different conditions, and identifying genes having a role in
CC various cellular processes. The method is useful for the analysis and
CC identification of transcribed genes, and fingerprinting. The method can
CC be used to identify genes which play a role in determining various
CC cellular processes, including susceptibility to external factors,
CC development, and disease. The present sequence for a PCR primer is used
CC in the production of a single pattern characteristic of a sample,
CC employing a Type IIS restriction enzyme (i.e. FokI) in the methods of the
CC present invention
XX
XX Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA AAAAAAAAAA 2724
Db 16 AAAAAA AAAAAAAAAA 1

RESULT 1463
ABK49634/C
ID ABK49634 standard; DNA; 17 BP.
XX
XX ABK49634;
AC
XX
XX 15-JUL-2002 (first entry)
DT
XX
XX Human Acetyltransferase-like protein 20-90-05 PCR primer GT15A.
DE
XX
XX Human; ss; PCR; acetyltransferase; 20-90-05; allergic disease; primer;
KW differential display; eosinophil; antiallergic; atopic dermatitis; GT15A.
XX
XX Homo sapiens.
OS
XX
XX WO200224903-A1.
PN
XX
XX 28-MAR-2002.
PD
XX
XX 21-SEP-2001; 2001WO-JP008246.
PF
XX
XX 25-SEP-2000; 2000JP-00291318.
PR
XX
XX (GENO-) GENOX RES INC.
PA
XX (NICE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
PA
XX (EISA) EISAI CO LTD.
XX
XX Sugita Y, Hashida R, Ogawa K, Fujishima T, Nagasu T, Tsujimoto G;
PI Takahashi E;

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XX WPI; 2002-315738/35.
XX
PT Examining allergic diseases by differential display of gene showing
PT different expression particularly increased expression in remission stage
PT in eosinophils of patients, also applicable in screening candidate
PT compounds for remedies.
XX
PS Example 1; Page 56; 72pp; Japanese.
XX
CC The invention relates to a method for examining allergic diseases
CC comprises determining the expression level of a gene containing, the
CC human cDNA appearing as ABK49633 which has homology with
CC acetyltransferases in the eosinophils of a patient and comparing the
CC expression level with that in the eosinophils of a healthy individual
CC (i.e. differential display). Also included are methods of screening for
CC candidate compounds which affect the expression level of the gene or the
CC activity of the protein encoded by the gene (including related proteins
CC and mutants), the use of probes based on the gene sequence in the
CC examination of allergic diseases, the use of reporter constructs in the
CC screening of candidate compounds, a vector containing a the transcription
CC controlling region of the gene, cells transformed with the vector, an
CC antibody against the protein and a model animal for allergic diseases
CC which is a transgenic non-human vertebrate with lowering of expression
CC intensity of the gene in eosinophils. The method is examining allergic
CC diseases particularly atopic dermatitis which is also applicable in
CC screening candidate compounds for remedies. Such method can be performed
CC in high throughput, at low cost. The present sequence is a differential
CC display PCR primer for the cDNA encoding the human acetyltransferase-like
CC protein 20-90-05
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723
Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1464
ABL59038/c
ID ABL59038 standard; DNA; 17 BP.
XX
AC ABL59038;
XX
DT 20-AUG-2002 (first entry)
XX
DE Nucleotide sequence of PCR primer GT15A.
XX
KW Human; allergic; eosinophil; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN JP2002095500-A.
XX
PD 02-APR-2002.
XX
PF 25-SEP-2000; 2000JP-00291316.
XX
PR 25-SEP-2000; 2000JP-00291316.
XX
PA (GENO-) GENOX SOYAKU KENKYUSHO KK.
PA (KOKU-) KOKURITSU SHONI BYOIN INCHO.
XX
WPI; 2002-439993/47.
XX
PT Examining allergic diseases, involves measuring the expression levels of a
PT specific gene, and comparing it to the levels in the eosinophils of a
PT healthy control.
XX

```

```

PS Example 1; Page 17; 20pp; Japanese.
XX
CC The specification describes a method for examining allergic diseases. The method
CC comprises measuring the expression level of the gene given in ABL59037,
CC and comparing it with the expression level of the gene in the eosinophils
CC of a healthy person. The method is used for the examination of
CC allergic diseases. The present sequence represents a PCR primer, which is used
CC in the course of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723
Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1465
ABN99829/c
ID ABN99829 standard; DNA; 17 BP.
XX
AC ABN99829;
XX
DT 15-AUG-2002 (first entry)
XX
DE Human allergic disease related PCR primer SEQ ID NO: 18.
XX
KW Human; allergy; atopic dermatitis; eosinophil; anti-allergic; PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO200233069-A1.
XX
PD 25-APR-2002.
XX
PF 28-SEP-2001; 2001WO-JP008574.
XX
PR 13-OCT-2000; 2000JP-00314093.
XX
PA (GENO-) GENOX RES INC.
PA (NIGB-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX
PI Sugita Y, Hashida R, Ogawa K, Obayashi M, Nagasu T, Saito H;
XX
WPI; 2002-372311/40.
XX
PT Method for examining allergic diseases by differential display of
PT seventeen genes showing different expression particularly significant
PT increase in eosinophils in patients with mild atopic dermatitis, also
PT applicable in screening compounds.
XX
PS Example 1; Page 109; 165pp; Japanese.
XX
CC The present invention relates to a method for examining allergic diseases
CC which involves determining the expression level of a gene, having one of
CC the 17 nucleotide sequences shown in ABN99812-ABN99828, in the
CC eosinophils in a patient and comparing the expression level with that in
CC the eosinophils of a healthy individual. The method can be used to
CC examine allergic diseases, particularly atopic dermatitis, and its early
CC diagnosis, which is also applicable in screening candidate compounds for
CC remedies. The present sequence is a PCR primer described in the
CC exemplification of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```


CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.

XX Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
 DB 16 AAAAAAAAAAAAAA 1

RESULT 1471

ACC65266
 ID ACC65266 standard; DNA; 17 BP.

XX

AC ACC65266;

XX 01-JUL-2003 (first entry)

DT

DE Murine oligonucleotide associated with tumour suppression, SEQ ID 2513.

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;

KW tumour suppression; tumour reversion; apoptosis; virus resistance;

KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;

KW schizophrenia; ss.

XX

OS Mus musculus.

XX WO2003025176-A2.

PN

XX 27-MAR-2003.

PD

XX 17-SEP-2002; 2002WO-IB004210.

PF

XX 17-SEP-2001; 2001FR-00011979.

PR

XX (MOLE-) MOLECULAR ENGINES LAB.

XX

PI Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-333167/31.

DR

XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.

XX Disclosure; Page 324; 739pp; French.

PS

XX The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia

XX Sequence 17 BP; 1 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 896 GATCTCTGGCTGTGG 911
 DB 1 GATCTCTGGCTGTGG 16

RESULT 1472

ABZ70578/c

ID ABZ70578 standard; DNA; 17 BP.

XX

AC ABZ70578;

XX

DT 23-MAY-2003 (first entry)

XX

DE Primer.

XX

KW Aspergillus phenices; oxalate decarboxylase; APOXD; transgenic plant;

KW crop protection; primer; ss.

XX

OS Synthetic.

XX CA2350328-A1.

PN

XX 26-DEC-2002.

PD

XX 26-JUN-2001; 2001CA-02350328.

PF

XX 26-JUN-2001; 2001CA-02350328.

PR

XX (PION-) PIONEER HI-BRED INT INC.

PA

XX Scelonge C, Bidney D;

PI

XX WPI; 2003-248733/25.

XX

PT New isolated nucleic acid encoding oxalate decarboxylase from Aspergillus
 PT phenices, for degrading oxalic acid, identifying transformed plant
 PT cells, and preventing pathogenic disease in plants.

XX Disclosure; Page 50; 60pp; English.

XX

CC The present sequence is that of a primer used in the invention. The
 CC invention relates to a novel nucleic acid (see ABZ70560) encoding
 CC Aspergillus phenices oxalate decarboxylase (APOXD) (see ABP72475). The
 CC gene and its encoded protein are useful in degrading oxalate, in
 CC diagnostic assays, for protecting plants against disease, and as a
 CC selectable marker

XX Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;

SQ Query Match 0.6%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.1e+03; Length 17;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724

DB 17 AAAAAAAAAAAAAA 2

RESULT 1473

ACF36345/c

ID ACF36345 standard; DNA; 17 BP.

XX

AC ACF36345;

XX

DT 04-DEC-2003 (first entry)

XX

DE Nucleotide sequence of a double stranded product DNA fragment.

XX

KW Gene variant identification; restriction enzyme; FokI; ds.

XX

OS Synthetic.

XX

PN WO2003064689-A2.


```

XX PD 07-AUG-2003.
XX PF 28-JAN-2003; 2003WO-IB000255.
XX PR 29-JAN-2002; 2002US-0352245P.
XX PA (GLOB-) GLOBAL GENOMICS AB.
XX PI Lonnberg P, Oldin M, Linnarsson S, Ernfors P;
XX DR WPI; 2003-627619/59.
XX CC Determining polyadenylation sites within transcribed gene sequences
XX PT present in a sample comprises assigning to gene fragments gene candidates
XX PT within a database by comparing signals in the dataset with the database.
XX PS Example; Fig 3; 81pp; English.
XX CC The invention relates to determining the presence of and/or identifying a
XX CC polyadenylation site within a sequence of a transcribed gene or variants
XX CC present in a sample. The method involves assigning to gene fragments gene
XX CC candidates within a database by comparing signals in the dataset with the
XX CC database, the database comprising data representing mRNAs with known
XX CC polyA sites and/or 'virtual genes' representing a possible
XX CC polyadenylation site within an actual gene. The method is useful for
XX CC determining the presence of and/or identifying a polyadenylation site or
XX CC alternative polyadenylation sites within a sequence of a transcribed gene
XX CC or sequences of transcribed gene variants present or potentially present
XX CC in a sample, in identifying gene features, particularly in identifying
XX CC differences between sequence variants that occur in a population of
XX CC nucleic acid molecules, especially in identifying or discovering polyA
XX CC site usage or determining polyA site usage in a nucleic acid sample, and
XX CC gene variants arising from alternative polyA sites. The present sequence
XX CC represents a double stranded product DNA fragment
XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1
RESULT 1474
ACF36370/C
ID ACF36370 standard; DNA; 17 BP.
XX AC ACF36370;
XX DT 04-DEC-2003 (first entry)
XX DE Nucleotide sequence of a double stranded product DNA.
XX KW Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
XX KW electrophoresis; type II restriction enzyme; FokI; ds.
XX OS Synthetic.
XX PN WO2003064691-A2.
XX PD 07-AUG-2003.
XX PF 28-JAN-2003; 2003WO-IB000843.
XX PR 29-JAN-2002; 2002US-0352215P.
XX PA (GLOB-) GLOBAL GENOMICS AB.
XX PI Linnarsson S, Ernfors P, Bauren G, Metsis A, Pihlak A;

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PI Montelius A;
XX DR WPI; 2003-618365/58.
XX PT Producing a population of double-stranded product DNA molecules, useful
XX PT for mRNA profiling, comprises amplification by nested polymerase chain
XX PT reaction.
XX PS Example; Fig 2; 105pp; English.
XX CC The invention relates to producing a population of double-stranded
XX CC product DNA molecules comprising amplification by a nested PCR method.
XX CC The method is useful in profiling mRNA transcribed in a system under
XX CC investigation. The oligonucleotides are used as size standards in
XX CC electrophoresis, and as internal controls allowing for calculation of
XX CC relative amounts of material present. The present sequence represents a
XX CC double stranded product DNA, which aids in outlining an approach to
XX CC production of a single pattern characteristic of a sample, employing a
XX CC type II restriction enzyme (FokI)
XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1
RESULT 1475
ADC84468/C
ID ADC84468 standard; DNA; 17 BP.
XX AC ADC84468;
XX DT 01-JAN-2004 (first entry)
XX DE PCR primer for amplifying plant blastogenesis specific gene #SEQ ID 1.
XX KW Plant blastogenesis; transformation; gene expression; tissue specific;
XX KW PCR; primer; ss.
XX OS Synthetic.
XX PN JP2003159071-A.
XX PD 03-JUN-2003.
XX PF 22-NOV-2001; 2001JP-00358366.
XX PR 22-NOV-2001; 2001JP-00358366.
XX PA (DOKU-) DOKURITSU GYOSEI HOJIN NOGYO SEIBUTSU SH.
XX DR WPI; 2003-818678/77.
XX CC New naturally derived DNA specifically expressed during blastogenesis of
XX PT a plant, useful for producing a transformed plant and for compulsive
XX PT expression of a protein.
XX PS Example 3; SEQ ID NO 1; 43pp; Japanese.
XX CC The invention relates to naturally derived DNA specifically expressed
XX CC during plant blastogenesis. The DNA of the invention is useful for
XX CC producing a transformed plant. Methods of the invention are also useful
XX CC for compulsive expression of this DNA. Methods of the invention are
XX CC useful for plant tissue specific expression of genes. Also, the growth
XX CC stage of a plant can be controlled specifically. The current sequence
XX CC represents a PCR primer for amplifying a plant blastogenesis specific
XX CC gene of the invention.

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XX PD 19-JUN-2003.
XX PF
XX PP 22-NOV-2002; 2002WO-US037506.
XX PR 10-DEC-2001; 2001US-0339764P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Guo J;
XX PT WPI; 2003-532916/50.
XX PS
XX PT New prostate cancer candidate protein 1 (PCCP1), useful for preparing a
XX composition for treating or preventing a disorder associated with
XX decreased or increased expression or activity of PCCP1 e.g., tumor.
XX PS
XX PT Example 2; SEQ ID NO 162; 164pp; English.
XX CC The invention relates to a novel isolated nucleic acid that encodes a
XX protein with a chromatin organisation modifier (CHROMO) domain. The
XX polynucleotide of the invention demonstrates cytostatic activity and may
XX be useful for preparing a composition for treating or preventing a
XX disorder associated with decreased or increased expression or activity of
XX PCCP1 (prostate cancer candidate protein 1), such as a tumour, as well as
XX during gene therapy and vaccine production procedures. The current
XX sequence is that of the human PCCP1-related DNA fragment SEQ ID 4-
XX directed probe of the invention. Note: The current sequence is not shown
XX within the specification per se but was retrieved from the Wipoweb
XX database.
XX CC
XX SQ Sequence 17 BP; 11 A; 1 C; 5 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 703 AGAGGAAGAACAAAGAA 718
Db 1 AGAGGAAGAACAAAGAA 16

RESULT 1479
ADL48488/c
ID ADL48488 standard; RNA; 17 BP.
XX AC ADL48488;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #98.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX substrate; ds.
XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.

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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX PI Blatt L, Chowrira B, Haerberli P, Mcawiggen J, Foaugh K;
XX WPI; 2003-058513/05.
XX DR
XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite
XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX protein kinase PKR genes, for treating cancer and inflammatory disease.
XX PS
XX PT Claim 59; SEQ ID NO 2021; 317pp; English.
XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human IKK-
XX gamma substrate sequence.
XX SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
XX
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2535 GGCTTGTGCTCTCAGCC 2550
Db 16 GGCTTGTGCTCTCAGCC 1

RESULT 1480
ADL48641/c
ID ADL48641 standard; RNA; 17 BP.
XX AC ADL48641;
XX DT 20-MAY-2004 (first entry)
XX DE Human IKK-gamma substrate sequence #1151.
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX substrate; ds.
XX OS Unidentified.
XX PN WO200281628-A2.
XX PD 17-OCT-2002.
XX PF 03-APR-2002; 2002WO-US010512.
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.

```

PR 28-AUG-2001; 2001US-031515P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
 PI WPI; 2003-058513/05.
 XX
 DR Novel enzymatic nucleic acid that down-regulates expression of neurite
 XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
 PT protein kinase PKR genes, for treating cancer and inflammatory disease.
 PT
 XX Claim 59; SEQ ID NO 2174; 317pp; English.
 PS
 XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
 CC that down regulate the expression or inhibit the function of a receptor
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
 CC invention are useful for treating: cerebrovascular accident, central
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
 CC nucleic acids of the invention are also useful for down-regulating the
 CC expression of a target gene and as a diagnostic tool to examine genetic
 CC drifts and mutations within diseased cells or to detect the presence of a
 CC target RNA in a cell. The present RNA sequence represents a human IKK-
 CC gamma substrate sequence.
 XX
 SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2536 GCCTTGCTCTCAGCCA 2551
 DB 17 GCCTTGCTCTCAGCCA 2
 RESULT 1481
 AD113009/c
 ID AD113009 standard; DNA; 17 BP.
 AC
 XX AD113009;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE PCR primer GT15A used to amplify human NOR-1 (MINOR) DNA SeqID 3.
 XX
 KW human; PCR; ss; allergic disease; NOR-1; MINOR; eosinophil;
 KW atopic dermatitis; antiallergic; antiinflammatory; dermatological;
 KW primer.
 XX
 OS Homo sapiens.
 OS
 XX WO2004003198-A1.
 PN
 XX 08-JAN-2004.
 PD
 XX
 XX 27-JUN-2003; 2003WO-JP008199.
 PF
 XX 27-JUN-2002; 2002JP-00188490.
 PR
 XX (GENO-) GENOX RES INC.
 PA (NIGE-) JAPAN GEN AGENCY NATION.
 XX
 XX Hashida R, Kagaya S, Yayoi Y, Sugita Y, Saito H;
 PI WPI; 2004-083057/08.
 XX

PT Examining allergic diseases e.g. atopic dermatitis by differential
 PT display based on gene expression of NOR-1 receptor protein, also
 PT applicable in screening compounds for treatment of allergic diseases.
 XX
 XX Example 1; SEQ ID NO 3; 155pp; Japanese.
 PS
 XX This invention relates to a novel method for examining allergic diseases
 CC that comprises comparing the expression levels of a gene encoding the NOR
 CC -1 receptor protein between patients and healthy individuals.
 CC Specifically, the NOR-1 gene, also referred to as MINOR, is expressed in
 CC the specialist white blood cells known as eosinophils and is involved in
 CC mediating an allergic reaction. The present invention describes a
 CC differential display method that can identify the expression level of
 CC this gene in order to identify its usefulness in diagnosing allergic
 CC diseases such as atopic dermatitis. Furthermore, compositions can also be
 CC used to screen compounds for the treatment of allergic diseases.
 CC Accordingly, they exhibit various activities including antiallergic,
 CC antiinflammatory and dermatological. This oligonucleotide sequence is a
 CC PCR primer used to amplify human NOR-1 DNA in an exemplification of the
 CC invention.
 XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAA 2723
 DB 17 TAAAAAATAAAAAA 2
 RESULT 1482
 AED81275/c
 ID AED81275 standard; DNA; 17 BP.
 XX
 AC AED81275;
 XX
 DT 26-JAN-2006 (first entry)
 XX
 DE IL-10 expression assay, test oligonucleotide SEQ ID No:33.
 XX
 KW pharmaceutical; therapeutic; immune stimulation; immune response;
 KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
 KW immunosuppressive; phosphorothioate; ss.
 XX
 OS Synthetic.
 OS
 XX WO2005111057-A2.
 PN
 XX 24-NOV-2005.
 PD
 XX 04-APR-2005; 2005WO-US011827.
 PF
 XX 02-APR-2004; 2004US-0558951P.
 PR
 XX (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Vollmer J;
 XX WPI; 2005-786756/80.
 DR
 XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
 PT
 XX Example; SEQ ID NO 33; 111pp; English.
 PS
 XX The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XYN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G

CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
 CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.

XX Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAA 1

RESULT 1484

AAV54173
 ID AAV54173 standard; DNA; 18 BP.

XX AAV54173;

DT 09-SEP-2004 (revised)
 DT 05-APR-1992 (first entry)

XX L1 region of the bovine papillomavirus type 1a genome, fragment.

XX Diagnostic reagent; vaccine; medicine; wart; tumour; ss.

XX Bovine papillomavirus.

OS Unidentified.

XX Key Location/Qualifiers
 FT CDS 1..18
 FT /*tag= a

XX EP92456-A.

XX 26-OCT-1983.

XX 01-APR-1983; 83EP-00901081.

XX 05-APR-1982; 82FR-00005887.

XX (INSP) INST PASTEUR.

PA (DANO/) DANOS O.

XX Danos O, Katinka M, Yaniv M;

XX WPI; 1983-802979/44.

DR P-PSDB; AAP30313.

XX DNA fragment coding for Papillomavirus antigenic proteins - and derived
 PT immunogen, vaccine and antibody.

XX Claim 6; Page 16; 25pp; French.

XX The inventors claim DNA fragments capable of expressing, in a host, a
 CC prod. cong. at least one antigenic determinant of papillomavirus (PV).
 CC (see AAN30170-N30173). Also claimed are immunogens consisting of at least
 CC one peptide sequence coded for by the DNA fragments (see AAP30310-
 CC P30313), vaccines contg. the immunogens and antibodies raised from them.
 CC The vaccines are useful in human and veterinary medicine and the
 CC antibodies are useful as diagnostic reagents. The DNA fragments are most
 CC esp. derived from the L1 region of human PV type 1a

CC Revised record issued on 09-SEP-2004 : Correction of feature table key

XX Sequence 18 BP; 16 A; 1 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

. Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAA 2724

DB 3 AAAAAAAAAAAAAAA 18

RESULT 1485

AAV54173/c
 ID AAV54173 standard; cDNA; 18 BP.

XX AAV54173;

XX 21-DEC-1998 (first entry)

XX Nucleotide sequence PCR primer 10.

XX PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
 KW immunohistological staining.

XX Synthetic.

XX WO9839437-A1.

XX 11-SEP-1998.

XX 05-MAR-1998; 98WO-JP000905.

XX 05-MAR-1997; 97JP-00050302.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX Sakaki Y;

XX WPI; 1998-495844/42.

XX Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
 PT treating diseases associated with apoptosis.

XX Example 1; Page 50; 70pp; Japanese.

XX This is the nucleotide sequence of a PCR primer used in the method of the
 CC invention, involving the use of novel apoptosis-related DNAs and
 CC proteins. The inventions can be used as diagnostic reagents for apoptosis
 CC e.g. (monoclonal) antibodies for the protein, as a reagent in
 CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases

XX Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAA 2723

DB 17 TAAAAAAAAAAAAAA 2

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RESULT 1486
AAV54164/c
ID AAV54164 standard; cDNA; 18 BP.
XX
XX
AC AAV54164;
XX
DT 21-DEC-1998 (first entry)
XX
DE Nucleotide sequence PCR primer 1.
XX
KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
XX
OS Synthetic.
XX
PN WO9839437-A1.
XX
PD 11-SEP-1998.
XX
PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 47; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAAAAAA 2
XX
RESULT 1487
AAV54167/c
ID AAV54167 standard; cDNA; 18 BP.
XX
XX
AC AAV54167;
XX
DT 21-DEC-1998 (first entry)
XX
DE Nucleotide sequence PCR primer 4.
XX
KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
XX
OS Synthetic.
XX
PN WO9839437-A1.
XX
PD 11-SEP-1998.
XX
PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 47; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAAAAAA 2
XX
RESULT 1488
AAZ90649/c
ID AAZ90649 standard; DNA; 18 BP.
XX
AC AAZ90649;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #10.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISR ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

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PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 48; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 1 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAAAAAA 2
XX
RESULT 1488
AAZ90649/c
ID AAZ90649 standard; DNA; 18 BP.
XX
AC AAZ90649;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #10.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISR ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

```



```

Query Match          0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
    |||||...|||
Db 17 TAAAAA...AAAAA 2

RESULT 1489
AAZ90646/c
ID AAZ90646 standard; DNA; 18 BP.
XX
AC AAZ90646;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #7.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISB ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAZ90631-633) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match          0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
    |||||...|||
Db 17 TAAAAA...AAAAA 2

RESULT 1490
AAZ90643/c
ID AAZ90643 standard; DNA; 18 BP.
XX
AC AAZ90643;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #4.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX

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OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISB ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAZ90631-633) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match          0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
    |||||...|||
Db 17 TAAAAA...AAAAA 2

RESULT 1491
AAZ90643/c
ID AAZ90643 standard; DNA; 18 BP.
XX
AC AAZ90643;
XX
DT 10-MAY-2001 (first entry)
XX
DE Binary encoded sequence tag method anchored primer #1.
XX
KW Binary encoded sequence tag; BEST; nucleic acid analysis;
KW gene expression; adaptor; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO200112855-A2.
XX
PD 22-FEB-2001.
XX
PF 11-AUG-2000; 2000WO-US022164.
XX
PR 13-AUG-1999; 99US-0148870P.
XX
PR 06-APR-2000; 2000US-00544713.
XX
PA (UYVA ) UNIV YALE.
XX
PI Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX
DR WPI; 2001-202878/20.
XX
PT Producing binary sequence tags, useful for analyzing nucleic acid
PT sequence tags, gene expression or gene-expression patterns, involves
PT generating nucleic acid fragments, which are mixed with offset adaptors
PT and adaptor-indexers.
XX
PS Disclosure; Page 100; 101pp; English.

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XX CC The present invention describes a method of producing binary sequence
CC tags from nucleic acid fragments in a sample, involving incubating the
CC sample with cleaving reagents, mixing offset adaptors with the sample,
CC incubating with more cleaving reagents and mixing the sample with adaptor
CC -indexers where the adaptors are coupled to binary sequence tags. The
CC method is useful in sequence analysis, including analysis and comparison
CC of gene expression, nucleic acid samples and genomes
XX SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

Query Match          0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1492
ABK51158/c
ID ABK51158 standard; DNA; 18 BP.
AC ABK51158;
XX
DT 30-JUL-2002 (first entry)
DE Human cytomegalovirus (HCMV) RT-PCR primer TXN.
XX
KW Human cytomegalovirus; HCMV; virucide; cytomegalovirus' infection; CMV;
KW cellular kinase; RICK; RIP; Nck-interacting kinase; MKK3; SRPK-2;
KW reverse transcriptase PCR; RT-PCR; primer; ss.
XX
OS Human cytomegalovirus.
XX
FH Key Location/Qualifiers
FT misc_difference 17 /*tag= a
FT FT /label= n
FT FT /note= "n= dATP, dCTP or dGTP"
XX
PN EPI201765-A2.
XX
PD 02-MAY-2002.
XX
PF 15-OCT-2001; 2001EP-00124604.
XX
PR 16-OCT-2000; 2000US-0240750P.
XX
PA (AXXI-) AXXIMA PHARM AG.
XX
PI Schubart D, Habenberger P, Stein-Gerlach M, Bevec D;
XX WPI; 2002-373930/41.
XX
XX Identifying agents for treatment or prevention of cytomegalovirus
PT infection, comprises contacting test compound with cellular kinase and
PT detecting change in cellular kinase activity.
XX
XX Example 1; Page 13; 49pp; English.
XX
XX The present invention relates to a new method for identifying compounds
CC for treating and/or preventing cytomegalovirus (CMV) infection and/or
CC related diseases. The method of the invention comprises contacting a test
CC compound with at least one of the cellular kinases RICK, RIP, Nck-
CC interacting kinase, MKK3 and SRPK-2 and detecting any change in kinase
CC activity. The method of the invention can be used to treat and/or prevent
CC CMV infections and related diseases. Oligonucleotides that can detect the
CC specified kinases can also be used for diagnosis of infection. The
CC present nucleic acid sequence represents human CMV reverse transcriptase
CC (Rt)-PCR primer TXN that was used in the methods of the invention for
CC preparation of radioactively labelled cDNA probes

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XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;

Query Match          0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1493
AAD52799/c
ID AAD52799 standard; DNA; 18 BP.
XX
AC AAD52799;
XX
DT 14-MAY-2003 (first entry)
DE Primer used to prepare radioactively labelled cDNA probes from RNA.
XX
KW Human; pyridylpyrimidine derivative; cellular protein kinase; Scrapie;
KW cellular protein phosphatase; cellular signal transduction; prophylaxis;
KW prion infection; chronic wasting disease; CWD; Creutzfeldt-Jacob disease;
KW CJD; transmissible mink encephalopathy; bovine spongiform encephalopathy;
KW TSE; BSE; Gerstmann-Strausler-Scheinker syndrome; GSS; Alpers syndrome;
KW fatal familial insomnia; FFI; kuru; neurodegenerative disease; nontropic;
KW Alzheimer's disease; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200293164-A2.
XX
PD 21-NOV-2002.
XX
PF 16-MAY-2002; 2002WO-EP005420.
XX
PR 16-MAY-2001; 2001EP-00111858.
PR 29-MAY-2001; 2001US-0293528P.
PR 13-JUL-2001; 2001EP-00117113.
PR 18-JUL-2001; 2001US-0305898P.
XX
PA (AXXI-) AXXIMA PHARM AG.
XX
PI Stein-Gerlach M, Salassidis K, Bacher G, Mueller S;
XX WPI; 2003-120714/11.
XX
XX New pyridylpyrimidine derivatives useful in the treatment or prevention
PT of infectious disease e.g. Kuru syndrome and Creutzfeld-Jacob disease
PT (CJD).
XX
XX Example; Page 38; 96pp; English.
XX
XX The invention relates to novel pyridylpyrimidine derivatives and methods
CC of detecting prion infections and/or prion disease in an individual or in
CC cells, cell cultures and/or cell lysates. The method involves adding at
CC least one monoclonal or polyclonal antibody, oligonucleotide or pyridyl-
CC pyrimidine derivative to the sample or in cells, cell cultures and/or
CC cell lysates and detecting the activity of at least one human cellular
CC protein kinases (e.g., FGF-R1 (also known as flg, Flt-1, Flt-2, b-FGFR),
CC Tkt (also known as CCK-2, DDR-2 or EDDR; EC number 2.7.1.112), Abl (also
CC known as c-abl), ckl, MKK7 (also known as SAPK1a, SAPKalpha), CDC2 (also
CC known as CDK1), PKR), human cellular protein phosphatases such as PTP-SL
CC (also known as MCP83) and PTP-zeta, the cellular signal transduction
CC molecules HSP80 and GPR-1. The invention is useful for regulating the
CC production of prions in cells and in the manufacture of pharmaceutical
CC composition for prophylaxis and/or treatment of infectious disease (e.g.
CC Scrapie, chronic wasting disease (CWD), transmissible mink encephalopathy
CC (TME), Creutzfeld-Jacob disease (CJD), bovine spongiform encephalopathy
CC (BSE), variant CJD, Gerstmann-Strausler-Scheinker syndrome (GSS), fatal
CC familial insomnia (FFI), Kuru and Alpers syndrome, especially BSE, CJD,
CC

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CC vCJD) or neurodegenerative diseases (e.g., Alzheimer's disease) in humans
 CC or ruminants. The present DNA sequence is a primer used to prepare
 CC radioactively labelled cDNA probes from RNA. This sequence is used in the
 CC exemplification of the invention

XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAA 2724

Db 16 AAAAAAAAAAAAAA 1

RESULT 1494

ADL95318/c

ID ADL95318 standard; DNA; 18 BP.

XX

AC ADL95318;

XX

DT 01-JUL-2004 (first entry)

XX

DE Anti-proliferative oligonucleotide #9.

XX

ss; anti-proliferative; cellular proliferation; restenosis; angioplasty;
 cancer; malignant tumour.

XX

OS Synthetic.

XX

PH Key Location/Qualifiers

FT modified_base 8

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Optionally 32-P labelled"

XX

PN US2004067197-A1.

XX

PD 08-APR-2004.

XX

PF 02-FEB-2001; 2001US-00775479.

XX

PR 26-NOV-1997; 97WO-CA000892.

XX

PR 24-MAY-1999; 99US-00318106.

XX

PA (LECL/) LECLERC G.

PA (MART/) MARTEL R.

XX

PI Leclerc G, Martel R;

XX

PS WPI; 2004-314974/29.

XX

PT New anti-proliferative substance comprising a radiolabeled DNA carrier,
 useful for preventing or treating uncontrolled cellular proliferation

XX

PT e.g. restenosis, cancer or malignant tumors.

XX

XX Claim 13; SEQ ID NO 9; 28pp; English.

XX

CC The invention relates to an anti-proliferative substance for preventing
 uncontrolled cellular proliferation comprising a radiolabelled DNA

CC

CC carrier, where a radioisotope is located internally within the DNA
 sequence, at 5' end or at 3' end, and the radiolabelled DNA carrier

CC

CC penetrates the cell membrane and is retained intracellularly for a time
 sufficient for the radio-isotope to effect a dose therapy. The carrier in

CC

CC the anti-proliferative substance is an oligonucleotide, which is linear
 or a plasmid, which is circular. The plasmid is of viral or bacterial

CC

CC origin. The oligonucleotide is a double- or a single-stranded DNA
 sequence, which is conjugated with an antibody for cell-specific

CC

CC delivery. The oligonucleotide is also conjugated to a stent surface,
 cholesterol, oleic acid, linoleic acid, TGbeta, antibody, TGbeta,

CC uncontrolled cell proliferation is a restenosis following angioplasty, or
 cancer or a malignant tumour. The present sequence represents an
 CC oligonucleotide carrier used in the invention.

XX

SQ Sequence 18 BP; 3 A; 0 C; 0 G; 15 T; 0 U; 0 Other;

Query Match

Best Local Similarity 100.0%; Score 16; DB 1; Length 18;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723

Db 16 TAAAAAAAAAAAAA 1

RESULT 1495

AEC52473

ID AEC52473 standard; DNA; 18 BP.

XX

AC AEC52473;

XX

DT 17-NOV-2005 (first entry)

XX

DE Antisense oligonucleotide targeting human TGF-beta-3 #871.

XX

KW Transforming growth factor beta; TGF-beta-3; antisense therapy;
 antisense oligonucleotide; ss; cancer; cytostatic.

XX

OS Homo sapiens.

XX

PN WO2005084712-A2.

XX

PD 15-SEP-2005.

XX

PF 28-FEB-2005; 2005WO-EP002101.

XX

PR 27-FEB-2004; 2004EP-00004478.

XX

PR 01-APR-2004; 2004US-0558135P.

XX

PA (ANTI-) ANTISENSE PHARMA GMBH.

XX

PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;

XX

PI Bischof A, Hafner M, Egger T;

XX

DR WPI; 2005-630685/64.

XX

PT New antisense oligonucleotides inhibiting the synthesis of proteins
 involved in the formation of metastases such as transforming growth
 factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for

XX

PT treating cancer.

XX

PS Claim 4; Page 71; 106pp; English.

XX

CC The invention relates to an antisense oligonucleotide or its active
 derivative selected from AEC46374-AEC46395, targeting human interleukin-
 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the
 CC formation of metastases. The oligonucleotide is an antisense

CC oligonucleotide inhibiting the production of transforming growth factor
 (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue

CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are

CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical

CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,

CC

CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilms' tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.

XX SQ Sequence 18 BP; 15 A; 0 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 0;

QY 2708 TAAAAA AAAAAAAAAA 2723

Db 1 TAAAAA AAAAAAAAAA 16

RESULT 1496

AEC52193
 ID AEC52193 standard; DNA; 18 BP.

XX AC AEC52193;

XX DT 17-NOV-2005 (first entry)

XX DE Antisense oligonucleotide targeting human TGF-beta-3 #591.

XX KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX KW antisense oligonucleotide; ss; cancer; cytostatic.

XX OS Homo sapiens.

XX PN WO2005084712-A2.

XX PD 15-SEP-2005.

XX PF 28-FEB-2005; 2005WO-EP002101.

XX PR 27-FEB-2004; 2004EP-00004478.

XX PR 01-APR-2004; 2004US-0558135P.

XX PA (ANTI-) ANTISENSE PHARMA GMBH.

XX PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;
 PI Bischof A, Hafner M, Egger T;

XX PS WPI; 2005-630685/64.

XX PT New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.

XX PS Claim 4; Page 71; 106pp; English.

XX CC The invention relates to an antisense oligonucleotide or its active
 CC derivative selected from AEC46374-AEC46395, targeting human interleukin-
 CC 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the

CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are
 CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,
 CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilms' tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.

XX SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2723

Db 3 TAAAAA AAAAAAAAAA 18

RESULT 1497

AEC52333

ID AEC52333 standard; DNA; 18 BP.

XX AC AEC52333;

XX DT 17-NOV-2005 (first entry)

XX DE Antisense oligonucleotide targeting human TGF-beta-3 #731.

XX KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX KW antisense oligonucleotide; ss; cancer; cytostatic.

XX OS Homo sapiens.

XX PN WO2005084712-A2.

XX PD 15-SEP-2005.

XX PF 28-FEB-2005; 2005WO-EP002101.

XX PR 27-FEB-2004; 2004EP-00004478.

XX PR 01-APR-2004; 2004US-0558135P.

XX PA (ANTI-) ANTISENSE PHARMA GMBH.

XX PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;
 PI Bischof A, Hafner M, Egger T;

XX PS WPI; 2005-630685/64.

XX PT New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.

PS Claim 4; Page 71; 106pp; English.

XX The invention relates to an antisense oligonucleotide or its active derivative selected from AEC46374-AEC46395, targeting human interleukin-10 (IL-10). Also included are a process of manufacturing the antisense oligonucleotide (or its active derivative, by adding consecutive nucleosides and linker stepwise or by cutting the oligonucleotide out of longer oligonucleotide chain), a pharmaceutical composition comprising the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a composition for treating cancer. The oligonucleotide is an antisense oligonucleotide inhibiting the synthesis of proteins involved in the formation of metastases. The oligonucleotide is an antisense oligonucleotide inhibiting the production of transforming growth factor (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are useful for the preparation of a pharmaceutical composition for inhibiting the formation of metastases in cancer treatment. The oligonucleotides are useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma, brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma, endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder cancer, gastric cancer, head and neck cancer, hepatocellular cancer, liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma, papillary carcinoma, papillary adenocarcinoma, prostate cancer, small intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma, testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas, trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma, Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma, hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma, neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas, Wilm's tumor and/or myeloma, multiple. The present sequence is an antisense oligonucleotide targeting human TGF-beta-3.

XX Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2723
Db 2 TAAAAAAAAAAAAAAAAA 17

RESULT 1498
ADK70862
ID ADK70862 standard; DNA; 19 BP.
XX AC ADK70862;
XX DT 06-MAY-2004 (first entry)
DE 5' mRNA DNA preparation method related tag DNA sequence #30.
XX DNA preparation; 5' mRNA; linker synthesis; primer synthesis;
KW gene regulation; gene expression; ss; tag.
XX Unidentified.
OS WO2003106672-A2.
PN 24-DEC-2003.
XX 12-JUN-2003; 2003WO-JP007514.
PF 12-JUN-2002; 2002JP-00171851.
XX 12-AUG-2002; 2002JP-00235294.
PR (RIKE) RIKEN KK.

PA (DNAF-) DNAFORM KK.
XX Hayashizaki Y, Carninci P, Harbers MT;
XX WPI; 2004-082194/08.
XX Preparing DNA fragment corresponding to nucleotide sequence of 5' end region of mRNA, by preparing nucleic acid corresponding to nucleotide sequence of 5' end of mRNA, cleaving nucleic acid with restriction enzyme.
XX Example 5; SEQ ID NO 62; 121pp; English.
XX The invention comprises a method for preparing a DNA fragment corresponding to a nucleotide sequence of a 5' end of an mRNA. The method is useful for synthesizing a nucleotide sequence to be used as a linker or primer and selectively collecting multiple nucleic acid fragments containing information on the nucleotide sequences at the 5' end of multiple mRNA in a sample. The method is also useful for identifying regions in the genome, which are required for gene regulation and gene expression. The present DNA sequence was used in an example of the invention.
XX Sequence 19 BP; 16 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724
Db 2 AAAAAAAAAAAAAAAAAA 17

RESULT 1499
ADR81681/c
ID ADR81681 standard; DNA; 19 BP.
XX AC ADR81681;
XX DT 16-DEC-2004 (first entry)
DE Hepatitis C virus (HCV) oligonucleotide seqid 6180.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
XX Hepatitis C virus.
OS WO2004080406-A2.
PN 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0462894P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 XX
 XX (ALNY-) ALNYLAM PHARM.
 XX
 XX Manoharan M, Buncrot D;
 XX WPI; 2004-677362/66.
 XX
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 XX Example 5; SEQ ID NO 6180; 378pp; English.
 XX
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 16; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db |||||
 19 AAAAAAAAAAAAAA 4
 RESULT 1500
 ADT86138/c
 ID ADT86138 standard; DNA; 19 BP.
 XX
 XX AC ADT86138;
 XX
 XX 13-JAN-2005 (first entry)
 DT
 XX Hepatitis C virus (HCV) antisense inhibition target seqid 6180.
 DE
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
 KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
 KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
 KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
 KW coronary artery disease; coronary heart disease; atherosclerosis;

KW hepatic glucose production; glucose-metabolism-related disorder;
 KW type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
 KW antisense inhibition; ss.
 XX
 XX Hepatitis C virus.
 XX
 XX WO2004091515-A2.
 XX 28-OCT-2004.
 XX
 XX 09-APR-2004; 2004WO-US011255.
 XX
 XX 09-APR-2003; 2003US-0462097P.
 PR 10-APR-2003; 2003US-0461915P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 PR 08-MAR-2004; 2004WO-US007070.
 PR 05-APR-2004; 2004WO-US010586.
 XX (ALNY-) ALNYLAM PHARM INC.
 XX
 XX Manoharan M, Elbashir S, Harborth J;
 XX WPI; 2004-766693/75.
 XX
 XX New interference RNA agent comprising sense sequence and antisense
 PT sequence having cholesterol moieties, useful for reducing apoB-100 levels
 PT or glucose-6-phosphatase levels.
 XX
 XX Example 4; SEQ ID NO 6180; 324pp; English.
 XX
 CC The invention describes an interference RNA (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequence
 CC comprises one or more cholesterol moieties, and the antisense sequence
 CC targets a human gene sequence. The following are disclosed: a
 CC pharmaceutical composition comprising (I); and a device for administering
 CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
 CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
 CC any one of sequences as given in the specification. (I) comprises a
 CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
 CC (I) further comprises a second cholesterol moiety. The second cholesterol
 CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
 CC duplex region of (I) is 19 nucleotides in length. The subject is
 CC suffering from a disorder having elevated or otherwise unwanted
 CC expression of apo-B-100, elevated or otherwise unwanted levels of
 CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
 CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
 CC combined hyperlipidaemia or acquired hyperlipidaemia),
 CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
 CC artery disease, coronary heart disease and atherosclerosis, preferably
 CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
 CC to inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorders e.g., type-2 diabetes or glitaxzone-resistant diabetes.
 CC (I) has endonuclease or exonuclease resistance. This sequence represents
 CC a human hepatitis C virus (HCV) pallindromic sequence that may be useful
 CC as a target for antisense inhibition of HCV in human liver cells.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724

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Db          ||||| 19 AAAAAAAAAAAAAA 4
RESULT 1501
AEA99200/c ID AEA99200 standard; RNA; 19 BP.
XX AC AEA99200;
XX DT 11-AUG-2005 (first entry)
XX DE Human Fas and FasL genes lower siRNA sequence SEQ ID NO:300.
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN US2005119212-A1.
XX PD 02-JUN-2005.
XX PF 18-JUN-2004; 2004US-00871222.
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 20-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2003; 2003WO-US005346.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-0044853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004US-0013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Haerberli P, Mcswiggen J;
XX DR WPI; 2005-494870/50.
XX KW Treating spinal cord injury in subject, involves administering to
PT subject, short interfering nucleic acid directing cleavage of Fas RNA
PT through RNA interference under conditions suitable to modulate expression
PT of Fas in subject.
XX PS Claim 33; SEQ ID NO 300; 98pp; English.
XX CC The invention relates to a method (M1) for treating spinal cord injury in
CC a subject. (M1) involves administering to the subject, a short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a
CC Fas RNA through RNA interference (RNAi) under conditions suitable to
CC modulate the expression of Fas in the subject. Also described: (1) an
CC expression vector comprising (I); (2) a kit comprising (I); (3) a human
CC cell comprising (I); (4) a pharmaceutical composition comprising (I); and
CC (5) a method of synthesizing (I). The present sequence represents a human
CC Fas gene and Fas ligand (FasL) lower (antisense) siRNA oligonucleotide,
CC which is used in the exemplification of the present invention.
```

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XX SQ Sequence 19 BP; 2 A; 2 C; 0 G; 0 T; 15 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2708 TAAAAAAAAAAAAAAAAA 2723
Db 16 TAAAAAAAAAAAAAAAAA 1
RESULT 1502
AEA99050 ID AEA99050 standard; RNA; 19 BP.
XX AC AEA99050;
XX DT 11-AUG-2005 (first entry)
XX DE Human Fas and FasL genes target and upper siRNA SEQ ID NO:150.
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.
XX PN US2005119212-A1.
XX PD 02-JUN-2005.
XX PF 18-JUN-2004; 2004US-00871222.
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 20-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2003; 2003WO-US005346.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-0044853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004WO-US013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Haerberli P, Mcswiggen J;
XX DR WPI; 2005-494870/50.
XX KW Treating spinal cord injury in subject, involves administering to
PT subject, short interfering nucleic acid directing cleavage of Fas RNA
PT through RNA interference under conditions suitable to modulate expression
PT of Fas in subject.
XX PS Claim 33; SEQ ID NO 150; 98pp; English.
XX CC The invention relates to a method (M1) for treating spinal cord injury in
CC a subject. (M1) involves administering to the subject, a short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a
CC Fas RNA through RNA interference (RNAi) under conditions suitable to
CC modulate the expression of Fas in the subject. Also described: (1) an
CC expression vector comprising (I); (2) a kit comprising (I); (3) a human
CC cell comprising (I); (4) a pharmaceutical composition comprising (I); and
CC (5) a method of synthesizing (I). The present sequence represents a human
CC Fas gene and Fas ligand (FasL) lower (antisense) siRNA oligonucleotide,
CC which is used in the exemplification of the present invention.
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CC Fas RNA through RNA interference (RNAi) under conditions suitable to
 CC modulate the expression of Fas in the subject. Also described: (1) an
 CC expression vector comprising (i); (2) a kit comprising (i); (3) a human
 CC cell comprising (i); (4) a pharmaceutical composition comprising (i); and
 CC (5) a method of synthesizing (i). The present sequence represents a human
 CC Fas gene and Fas ligand (FasL) target and upper (sense) siRNA
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX SQ Sequence 19 BP; 15 A; 0 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 1.2e+03;

Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2723

Db 4 UAAAAAATAAAAAA 19

RESULT 1503

AE32216

ID AEE32216 standard; RNA; 19 BP.

XX AC AEE32216;

XX DT 09-FEB-2006 (first entry)

XX DE Human ICAM1 siRNA lower strand SEQ ID 328.

XX RNA interference; gene silencing; siRNA; short interfering RNA; ss;
 KW intercellular adhesion molecule 1; ICAM1; CNS-Gen.; Neuroprotective;
 KW Nootropic; antiinflammatory; Antiarthritic; Antirheumatic; Antidiabetic;
 KW Gastrointestinal-Gen.; Dermatological; Immunosuppressive; Antidiabetic;
 KW Cytostatic; Cerebroprotective; Respiratory-Gen.; Hypotensive;
 KW inflammation; rheumatoid arthritis; inflammatory bowel disease;
 KW atopic dermatitis; asthma; autoimmune disease; multiple sclerosis;
 KW Crohns disease; diabetes mellitus; cancer; hyperproliferation;
 KW neurological disease; Alzheimers disease; brain injury; myopathy;
 KW respiratory disease; chronic obstructive pulmonary disease;
 KW pulmonary hypertension; emphysema; muscular-gen.

XX Homo sapiens.

XX OS WO2005045039-A2.

XX PN 19-MAY-2005.

XX PD 20-AUG-2004; 2004WO-US027366.

XX PF 23-OCT-2003; 2003US-00693059.

XX PR 24-NOV-2003; 2003US-00720448.

XX PR 03-DEC-2003; 2003US-00727780.

XX PR 14-JAN-2004; 2004US-00757803.

XX PR 10-FEB-2004; 2004US-0543480P.

XX PR 13-FEB-2004; 2004US-00780447.

XX PR 15-MAR-2004; 2004US-00800487.

XX PR 16-APR-2004; 2004US-00826966.

XX PR 30-APR-2004; 2004WO-US013456.

XX PR 24-MAY-2004; 2004WO-US016390.

XX (STRN-) SIRNA THERAPEUTICS INC.

XX Richards I, Mcswiggen J;

XX WI; 2005-746893/76.

XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of intracellular adhesion molecule RNA
 PT through RNA interference, useful for treating diseases e.g. cancer and
 PT inflammation.

XX Claim 33; SEQ ID NO 328; 200pp; English.

XX

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PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Richards I, Mcswiggen J;
XX WPI; 2005-746893/76.
XX
DR
XX
XX Novel chemically synthesized double-stranded short interfering nucleic
PT acid molecule directing cleavage of intracellular adhesion molecule RNA
PT through RNA interference, useful for treating diseases e.g. cancer and
PT inflammation.
XX
XX Claim 33; SEQ ID NO 162; 200pp; English.
XX
XX The invention relates to a chemically synthesized double-stranded short
CC interfering nucleic acid (siRNA) molecule directing cleavage of
CC intracellular adhesion molecule (ICAM) RNA through RNA interference
CC (RNAi), where each strand of the molecule is 18-23 nucleotides in length,
CC and one strand of the molecule comprises nucleotide sequence having
CC sufficient complementarity to the ICAM RNA for the siRNA molecule to
CC direct cleavage of the ICAM RNA through RNA. The siRNA is useful for
CC downregulation or inhibition of expression of ICAM gene and for
CC diagnosing, preventing or treating diseases associated with cellular
CC adhesion such as inflammatory disorders e.g. rheumatoid arthritis,
CC inflammatory bowel disease, atopic dermatitis and asthma, autoimmune
CC diseases e.g. multiple sclerosis, Crohn's disease and diabetes mellitus,
CC cancer and proliferative diseases e.g. ovarian cancer, lung cancer, renal
CC cell carcinoma and multiple myeloma, neurological diseases e.g.
CC Alzheimer's disease, brain injury, cerebral atrophy and congenital
CC myopathy, respiratory diseases e.g. chronic obstructive pulmonary
CC disease, pulmonary hypertension and emphysema (many more diseases are
CC given in the specification). The present sequence one strand of an siRNA
CC targeting human ICAM1.
XX
SQ Sequence 19 BP; 1 A; 1 C; 1 G; 0 T; 16 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 18 AAAAAAAAAAAAAA 3

RESULT 1505
AAD33499
ID AAD33499 standard; DNA; 20 BP.
XX
AC AAD33499;
XX
XX 01-JUL-2002 (first entry)
XX
XX T7T18Apad_PS27-20-0003 probe for calibration of molecular array data.
XX
XX Molecular array; probe; ss.
XX
XX Unidentified.
XX
XX EP1186673-A2.
XX
XX 13-MAR-2002.
XX
XX 10-SEP-2001; 2001EP-00307665.
XX
XX 11-SEP-2000; 2000US-00659173.
XX
XX (AGIL-) AGILENT TECHNOLOGIES INC.
XX
XX Wobler PK, Delenstarr GC;
XX
XX WPI; 2002-282886/33.
XX
XX Calibration of molecular array data by employing calibration probes that
PT

PT generate signals proportional to total concentrations of labeled target
PT molecules, and molecular arrays incorporating sets of calibration probes.
XX
XX Disclosure; Page 14; 32pp; English.
XX
XX The invention relates to a method for calibrating data scanned from a
CC molecular array. The method involves employing calibrations probes that
CC generate signals proportional to the total concentrations of labelled
CC target molecules to which the molecular array probes are directed over an
CC entire range of sample solutions and molecular arrays incorporating sets
CC of calibration probes. Method is useful for calibrating different types
CC of signals scanned from a molecular array, or calibrating signals scanned
CC from different molecular arrays. The present sequence is poly (A)
CC normalisation probe used in calibration of molecular array data
XX
SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1506
ACA90051
ID ACA90051 standard; DNA; 20 BP.
XX
AC ACA90051;
XX
XX 10-JUL-2003 (first entry)
XX
XX Cardiovascular disease differential gene expression related primer #98.
XX
XX Cardiovascular disease; arteriosclerosis; ischaemia; angina pectoris;
KW myocardial infarction; cardiast; antiarteriosclerotic; antianginal;
KW gene therapy; differential gene expression; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO2003031650-A2.
XX
XX 17-APR-2003.
XX
XX 02-OCT-2002; 2002WO-EP011034.
XX
XX 08-OCT-2001; 2001GB-00024145.
XX
XX (FARB ) BAYER AG.
XX
XX Munnes M, Gehrman M, Wick M, Schmitz G;
XX WPI; 2003-403108/38.
XX
XX Predicting, diagnosing or prognosing a cardiovascular disease, e.g.
PT angina, ischemia, myocardial infarction or arteriosclerosis by detection
PT of a polynucleotide in a biological sample comprises detecting a
PT hybridization complex.
XX
XX Example 3; Page 105; 454pp; English.
XX
XX The invention describes a method of predicting, diagnosing or prognosing
CC a cardiovascular disease by detection of a polynucleotide in a biological
CC sample comprises hybridising at least one of the polynucleotide to a
CC nucleic acid material of a biological sample, thus forming a
CC hybridisation complex, and detecting the hybridisation complex. The
CC polynucleotides, polypeptides, antisense molecule, antibody and reagent
CC are useful for preparing compositions for preventing, predicting or
CC diagnosing, or a medicament for treating a cardiovascular disease, e.g.
CC arteriosclerosis, ischaemia, angina pectoris, or myocardial infarction.
CC This sequence represents a primer used to identify genes differentially

```

CC regulated in individuals with cardiovascular disease
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2076 GAAGTGACAGCTTTGA 2091
DB 4 GAAGTGACAGCTTTGA 19
RESULT 1507
ABZ91658
ID ABZ91658 standard; DNA; 20 BP.
XX
AC ABZ91658;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6900; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: the sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 15 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2723
 Db 5 TAAAAAATAAAAAAAAAA 20
 |||||

RESULT 1509
 ADH67050/c
 ID ADH67050 standard; DNA; 20 BP.

AC ADH67050;

XX 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #3884.
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.

XX WO200309215-A2.

XX 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

XX Crosby SD, Naleeth AP;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 XX
 PS Claim 4; SEQ ID NO 3884; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity, The
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 1 A; 1 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAAA 2724
 Db 20 AAAAAAATAAAAAAAAAA 5
 |||||

RESULT 1510
 ADK76466/c
 ID ADK76466 standard; DNA; 20 BP.

XX ADK76466;

XX 20-MAY-2004 (first entry)

XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #3800.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache,
 KW infantile epilepsy; ataxia; ss.

XX Synthetic.

XX WO2004016754-A2.

XX 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025465.

XX 14-AUG-2002; 2002US-0403416P.

XX (PHAA) PHARMACIA CORP.

XX Roberts SL;

XX WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.

XX Claim 4; SEQ ID NO 3800; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAAA 2724
 Db 16 AAAAAAATAAAAAAAAAA 1
 |||||

```

RESULT 1511
ADK75214/C
ID ADK75214 standard; DNA; 20 BP.
XX
AC ADK75214;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2548.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 2548; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAA 2724
Db 20 AAAAAAAAAAAAAAA 5

RESULT 1512
AEE79008
ID AEE79008 standard; DNA; 20 BP.
XX
AC AEE79008;
XX
DT 09-FEB-2006 (first entry)
XX
DE Human dopamine receptor D2 (DRD2) DNA oligonucleotide SEQ ID NO:2629.
XX

Diagnosis; therapeutic; neurological disease; psychiatric disorder;
neuropsychologic disorder; dopamine receptor D2; DRD2; ss.
Homo sapiens.
WO2005118843-A1.
15-DEC-2005.
01-JUN-2005; 2005WO-AU000775.
01-JUN-2004; 2004AU-00902919.
(UYQU-) UNIV QUEENSLAND TECHNOLOGY.
Morris CP, Van Daal A, Swagell CD, Lawford BR, Young RM;
WPI; 2006-047555/05.
Identifying genetic profile associated with a neurological, psychiatric,
or psychological condition, comprises screening individuals for a
polymorphism in a genetic locus comprising the dopamine receptor D2
(DRD2) gene.
Disclosure; SEQ ID NO 2629; 634pp; English.
The invention relates to a method of identifying a genetic profile
associated with a neurological, psychiatric or psychological condition,
phenotype or state including a sub-threshold neurological, psychiatric or
psychological condition, phenotype or state in an individual, comprising
screening individuals for a polymorphism in a genetic locus comprising
the dopamine receptor D2 (DRD2) gene. The invention also relates to a
genetic mutation providing a genetic marker for a neurological,
psychiatric, or psychological condition, state or phenotype in an
individual, where the presence of a 957C polymorphism is indicative of a
predisposition to developing a neurological, psychiatric or psychological
condition, phenotype or state. The compositions and methods are useful
for identifying a genetic profile associated with a neurological,
psychiatric or psychological condition. The method enables clinicians to
make a genetic-based diagnosis of a neurological, psychiatric or
psychological condition and can thereby implement treatment or
preventative or symptom-ameliorating protocols to reduce the adverse
consequences of the condition. This sequence represents a human dopamine
receptor D2 (DRD2) DNA oligonucleotide used in the scope of the
invention.
Sequence 20 BP; 15 A; 0 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAA 2723
Db 5 TAAAAAAAAAAAAAA 20

RESULT 1513
AAZ32679
ID AAZ32679 standard; DNA; 19 BP.
XX
AC AAZ32679;
XX
DT 21-JAN-2000 (first entry)
XX
DE Human IL-10 PCR primer #1.
XX
KW IL-10; interleukin-10; reverse transcription; expression; RNA; liposome;
KW cationic; gene therapy; rheumatoid arthritis; targeting;
KW distal administration; delivery; macrophage; uptake; polyamine; PCR;
KW primer; ss.
XX
OS Synthetic.

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OS Homo sapiens.
XX
XX PN WO9554344-A1.
XX
XX PD 28-OCT-1999.
XX
XX PF 16-APR-1999; 99WO-GB001171.
XX
XX PR 17-APR-1998; 98GB-00008268.
XX
XX PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
XX PI Miller AD, Etheridge CJ, Fellowes R, Woo P, Duffels AT, Ley SV;
XX
XX DR WPI; 1999-633970/54.
XX
XX PT Use of composition comprising combination of derivatized cationic
XX liposomes and active agent in gene therapy, especially for amelioration
XX of established arthritis by IL-10 gene therapy.
XX
XX PS Example 1; Page 30; 115pp; English.
XX
XX CC This sequence represents a human IL-10 (interleukin-10) PCR primer #1,
XX used with primer #2 (AAZ32680) to amplify cDNA (generated via reverse
XX transcription of RNA) and DNA encoding human IL-10 in murine tissue
XX previously transfected with a human IL-10 expression vector. The
XX amplified DNA was then detected via in situ hybridisation with a human IL
XX -10-specific hybridisation probe (AAZ32681). The invention relates to the
XX use of a derivatised cationic liposome containing an agent of interest
XX (e.g., an IL-10 expression vector) to deliver the agent to a site that is
XX distal to the site of liposome administration. The derivatised cationic
XX liposome comprises a cationic liposome-forming entity (e.g., a lipid),
XX and a head-group and/or ligand which increases macrophage uptake of the
XX cationic liposome. Such liposomes can be used for the delivery of a
XX therapeutic agent, and is especially useful for the amelioration of
XX established rheumatoid arthritis by IL-10 gene therapy. A head-group
XX and/or ligand which increases macrophage uptake is used to improve
XX targeting and thereby make more efficient use of the cationic liposome
XX and agent of interest. If cholesterol is used as the cationic liposome-
XX forming entity, it stabilises the resultant liposomal bilayer. The
XX cationic liposome-forming entity is linked to the head group via a
XX carbamoyl linkage which results in the liposome having minimal toxicity.
XX A polyamine group used as the head-group increases the overall positive
XX charge on the liposome, and also increases the DNA binding and
XX stabilisation of the liposome. As polyamines occur naturally in cells,
XX toxicological problems should be minimal
XX
XX SQ Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1542 TGAAGACCAAGACCCGAC 1560
DB 1 TGAAGACCAAGACCCGAC 19

RESULT 1514
ABZ79441
ID ABZ79441 standard; DNA; 19 BP.
XX
XX AC ABZ79441;
XX
XX DT 01-MAY-2003 (first entry)
XX
XX DE Acetyl-Coenzyme A-carboxylase-alpha gene PCR primer, SEQ ID 128.
XX
XX KW Human; enzyme; acetyl-Coenzyme A-carboxylase-alpha; ACC-alpha; cancer;
XX breast; ovary; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2384 ACTGTGCCCATGCTGAAAG 2402
DB 1 ACTGAGCCCTGCTGAAAG 19

RESULT 1515
ADF93091/c
ID ADF93091 standard; RNA; 19 BP.
XX
XX AC ADF93091;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human EZH2 siRNA lower strand, SEQ ID 296.
XX
XX KW Human; polycomb group protein; EZH2; short interfering nucleic acid;
XX siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy;
XX cancer; restenosis; drug screening; diagnosis;
XX therapeutic target identification; pharmacogenomics;
XX gene function analysis; gene mapping; cytostatic; vasotropic; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070887-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 13-FEB-2003; 2003WO-US004402.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX
XX PR 11-MAR-2002; 2002US-0363124P.
XX
XX PR 06-JUN-2002; 2002US-0386782P.
XX
XX PR 29-AUG-2002; 2002US-0406784P.
XX
XX PR 05-SEP-2002; 2002US-0408378P.
XX
XX PR 09-SEP-2002; 2002US-0409293P.
XX

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PN WO2002100896-A2.
XX
XX PD 19-DEC-2002.
XX
XX PF 12-JUN-2002; 2002WO-FR002015.
XX
XX PR 13-JUN-2001; 2001FR-00007740.
XX
XX PR 05-MAR-2002; 2002FR-00002788.
XX
XX PA (CNRS ) CNRS CENT NAT RECH SCI.
XX (UCLY-) UNIV LYON 1 BERNARD CLAUDE.
XX
XX PI Dalla Venezia NL, Magnard CM, Lenoir GM, Sinilnikova-Erard O;
XX
XX DR WPI; 2003-175165/17.
XX
XX PT In vitro diagnosis of cancer, particularly breast and ovarian cancer, or
XX susceptibility, comprises detecting alterations in the acetyl coenzyme A-
XX carboxylase alpha gene or protein expression.
XX
XX PS Example 1; Page 12; 56pp; French.
XX
XX CC The present invention relates to human acetyl-Coenzyme A-carboxylase-
XX alpha (ACC-alpha; see ABZ79442), which can be used for in vitro diagnosis
XX of cancer (or of an increased risk of developing it), by detecting ACC-
XX alpha gene mutations or polymorphisms, or altered ACC-alpha protein
XX expression, relative to a control population. The method is particularly
XX used to diagnose cancer, especially of breast or ovary, or for assessing
XX the risk of developing such cancers. The present sequence is a PCR
XX primer, which was used in an example from the invention
XX
XX SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2384 ACTGTGCCCATGCTGAAAG 2402
DB 1 ACTGAGCCCTGCTGAAAG 19

RESULT 1515
ADF93091/c
ID ADF93091 standard; RNA; 19 BP.
XX
XX AC ADF93091;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human EZH2 siRNA lower strand, SEQ ID 296.
XX
XX KW Human; polycomb group protein; EZH2; short interfering nucleic acid;
XX siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy;
XX cancer; restenosis; drug screening; diagnosis;
XX therapeutic target identification; pharmacogenomics;
XX gene function analysis; gene mapping; cytostatic; vasotropic; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070887-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 13-FEB-2003; 2003WO-US004402.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX
XX PR 11-MAR-2002; 2002US-0363124P.
XX
XX PR 06-JUN-2002; 2002US-0386782P.
XX
XX PR 29-AUG-2002; 2002US-0406784P.
XX
XX PR 05-SEP-2002; 2002US-0408378P.
XX
XX PR 09-SEP-2002; 2002US-0409293P.
XX

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PR 19-NOV-2002; 2002US-0427467P.
PR 15-JAN-2003; 2003US-0440129P.
PA (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L, Haerberli P, Usman N;
XX WPI; 2003-712612/67.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of prostatic cancer, downregulates expression of the EZH2 gene.
XX
XX Example 7; Page 121; 140pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human polycomb group protein EZH2 gene by
XX RNA interference. The siNAs may or may not comprise ribonucleotides and
XX may be double or single stranded. They further comprise sense and
XX antisense regions, or alternatively are assembled from a sense
XX oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
XX include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
XX (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
XX chemically modified, can contain deoxyribonucleotides, and can be
XX synthesised. The invention also relates to kits for the in vitro or in
XX vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
XX that express siNA. The siNAs are used to modulate expression of the EZH2
XX gene in cells, tissue explants or organisms (e.g., by ex vivo gene
XX therapy), or in grafts and transplants for the treatment of a variety of
XX conditions. They may be used for treating cancer. The siNAs are also
XX useful for drug screening, diagnosis, pharmacogenomics, studying gene
XX function, and gene mapping (e.g., of single nucleotide polymorphisms).
XX The present sequence represents the lower strand of a human EZH2 targeted
XX double stranded siNA.
XX
XX Sequence 19 BP; 2 A; 1 C; 1 G; 0 T; 15 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2706 ACTTGAAGAAAAA 2724
XX DB 19 ACTTGAAGAAAAA 1
XX
XX RESULT 1516
XX ADF92943
XX ID ADF92943 standard; RNA; 19 BP.
XX XX ADF92943;
XX AC
XX
XX 26-FEB-2004 (first entry)
XX
XX Human EZH2 transcript target sequence/siNA upper strand, SEQ ID 148.
XX
XX Human; polycomb group protein; EZH2; short interfering nucleic acid;
XX siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy;
XX cancer; restenosis; drug screening; diagnosis;
XX therapeutic target identification; pharmacogenomics;
XX gene function analysis; gene mapping; cytostatic; vasotropic; ss.
XX
XX Homo sapiens.
XX
XX WO2003070887-A2.
XX
XX 28-AUG-2003.
XX
XX 13-FEB-2003; 2003WO-US004402.
XX
XX 20-FEB-2002; 2002US-0358560P.
XX

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PR 11-MAR-2002; 2002US-03631124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 19-NOV-2002; 2002US-0427467P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Haerberli P, Usman N;
XX WPI; 2003-712612/67.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of prostatic cancer, downregulates expression of the EZH2 gene.
XX
XX Example 7; Page 121; 140pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human polycomb group protein EZH2 gene by
XX RNA interference. The siNAs may or may not comprise ribonucleotides and
XX may be double or single stranded. They further comprise sense and
XX antisense regions, or alternatively are assembled from a sense
XX oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
XX include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
XX (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
XX chemically modified, can contain deoxyribonucleotides, and can be
XX synthesised. The invention also relates to kits for the in vitro or in
XX vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
XX that express siNA. The siNAs are used to modulate expression of the EZH2
XX gene in cells, tissue explants or organisms (e.g., by ex vivo gene
XX therapy), or in grafts and transplants for the treatment of a variety of
XX conditions. They may be used for treating cancer. The siNAs are also
XX useful for drug screening, diagnosis, pharmacogenomics, studying gene
XX function, and gene mapping (e.g., of single nucleotide polymorphisms).
XX The present sequence represents the upper strand of a human EZH2 targeted
XX double stranded siNA, which is identical to the EZH2 transcript target
XX sequence.
XX
XX Sequence 19 BP; 15 A; 1 C; 1 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 1.2e+03;
XX Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2706 ACTTGAAGAAAAA 2724
XX DB 1 ACUUGAAAAA 19
XX
XX RESULT 1517
XX ADF79331
XX ID ADF79331 standard; RNA; 19 BP.
XX
XX ADL79331;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:496.
XX
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; cancer;
XX cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.
XX
XX Homo sapiens.
XX

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PN	WO2003070912-A2.	DE	Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ:247.
XX		XX	
PD		KW	RNA interference; short interfering nucleic acid; siNA;
XX	28-AUG-2003.	KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX		KW	short hairpin RNA; shRNA; expression modulation; gene therapy;
PF	20-FEB-2003; 2003WO-US005045.	KW	drug screening; diagnosis; therapeutic target identification;
PR	20-FEB-2002; 2002US-0358580P.	KW	pharmacogenomics; gene function analysis; gene mapping; cancer;
PR	11-MAR-2002; 2002US-0363124P.	KW	cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
PR	29-MAY-2002; 2002WO-US016840.	KW	HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.
PR	06-JUN-2002; 2002US-00163552.	XX	
PR	06-JUN-2002; 2002US-0386782P.	OS	Homo sapiens.
PR	03-JUL-2002; 2002US-0393924P.	XX	
PR	29-AUG-2002; 2002US-0406784P.	XX	WO2003070912-A2.
PR	05-SEP-2002; 2002US-0408378P.	XX	28-AUG-2003.
PR	19-SEP-2002; 2002US-0409293P.	XX	
PR	09-SEP-2002; 2002US-00251117.	XX	20-FEB-2003; 2003WO-US005045.
PR	21-OCT-2002; 2002US-00277494.	XX	20-FEB-2002; 2002US-0358580P.
PR	15-JAN-2003; 2003US-0440129P.	PR	11-MAR-2002; 2002US-0363124P.
XX		PR	29-MAY-2002; 2002WO-US016840.
PA	(RIBO-) RIBOZYME PHARM INC.	PR	06-JUN-2002; 2002US-00163552.
XX		PR	06-JUN-2002; 2002US-0386782P.
PI	Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;	PR	03-JUL-2002; 2002US-0393924P.
XX		PR	29-AUG-2002; 2002US-0406784P.
XX	WPI; 2003-697612/66.	PR	05-SEP-2002; 2002US-0408378P.
DR		PR	19-SEP-2002; 2002US-0409293P.
XX		PR	09-SEP-2002; 2002US-00251117.
XX	New short interfering nucleic acid, useful e.g. for treatment and	PR	21-OCT-2002; 2002US-00277494.
PT	diagnosis of cancer, downregulates expression of the epidermal growth	PR	15-JAN-2003; 2003US-0440129P.
PT	factor receptor gene.	XX	
XX		XX	(RIBO-) RIBOZYME PHARM INC.
PS	Example 3; SEQ ID NO 496; 171pp; English.	XX	
XX		XX	
XX	The invention relates to short interfering nucleic acids (siNA) which	XX	
CC	downregulate expression of one or more human epidermal growth factor	XX	
CC	receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA	PI	Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
CC	interference. The siNAs may or may not comprise ribonucleotides and may	XX	
CC	be double or single stranded. They further comprise sense and antisense	XX	WPI; 2003-697612/66.
CC	regions, or alternatively are assembled from a sense oligonucleotide and	DR	
CC	an antisense oligonucleotide. Specifically, the siNAs include short	XX	
CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	PT	New short interfering nucleic acid, useful e.g. for treatment and
CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,	PT	diagnosis of cancer, downregulates expression of the epidermal growth
CC	can contain deoxyribonucleotides, and can be chemically synthesised,	PT	factor receptor gene.
CC	expressed from a vector or enzymatically synthesised. The invention also	XX	
CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates	PS	Example 3; SEQ ID NO 496; 171pp; English.
CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are	XX	
CC	used to modulate expression of EGFR genes in cells, tissue explants or	XX	
CC	organisms (e.g., by ex vivo gene therapy), or in grafts and transplants	XX	
CC	for the treatment of a variety of conditions. They may be used for	XX	
CC	treating a wide range of cancers such as breast and ovarian cancer. The	XX	
CC	siNAs are also useful for drug screening, diagnosis, therapeutic target	XX	
CC	identification and validation, genetic engineering, pharmacogenomics,	XX	
CC	studying gene function, and gene mapping (e.g., of single nucleotide	XX	
CC	polymorphisms). The present sequence represents the lower strand of a	XX	
CC	HER2 (EGFR2)-targeted double-stranded siNA.	XX	
XX		XX	
XX		XX	
SQ	Sequence 19 BP; 16 A; 2 C; 0 G; 0 T; 1 U; 0 Other;	SQ	Sequence 19 BP; 1 A; 0 C; 2 G; 0 T; 16 U; 0 Other;
	Query Match 0.6%; Score 15.8; DB 1; Length 19;		Query Match 0.6%; Score 15.8; DB 1; Length 19;
	Best Local Similarity 84.2%; Pred. No. 1.2e+03;		Best Local Similarity 89.5%; Pred. No. 1.2e+03;
	Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;		Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	2708 TAAAAAAAAAAAAAAAAA 2726		
	:		
Db	1 UAAAAAAAAACAAACAAA 19		
RESULT 1518			
ADL79082/C			
ID	ADL79082 standard; RNA; 19 BP.		
XX			
AC	ADL79082;		
XX			
DT	20-MAY-2004 (first entry)		
XX			

RESULT 1521
 ADR80868/c
 ID ADR80868 standard; DNA; 19 BP.
 XX
 AC ADR80868;
 DT 16-DEC-2004 (first entry)
 XX
 DE Human glucose-6-phosphatase oligonucleotide seqid 5367.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; glucose-6-phosphatase; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004080406-A2.
 XX
 PD 23-SEP-2004.
 XX
 PF 08-MAR-2004; 2004WO-US007070.
 XX
 PR 07-MAR-2003; 2003US-0452682P.
 PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 PA (ALNY-) ALNYLAM PHARM.
 XX
 PI Manoharan M, Bumcrot D;
 XX
 XX WPI; 2004-677362/66.
 XX
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 PS Example 5; SEQ ID NO 5367; 378pp; English.
 XX
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a human glucose-6-phosphatase antisense oligonucleotide that
 CC can be used to control glucose-6-phosphatase gene expression.
 XX
 SQ Sequence 19 BP; 1 A; 1 C; 2 G; 15 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2707 CTAAAAAAGGAAAAA 2725
 DB 19 CTCAAAAAAGGAAAAA 1
 RESULT 1522
 ADR85325/c
 ID ADR85325 standard; DNA; 19 BP.
 XX
 AC ADR85325;
 XX
 DT 13-JAN-2005 (first entry)
 DE Glucose-6-phosphatase antisense inhibition target seqid 5367.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
 KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
 KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
 KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
 KW coronary artery disease; coronary heart disease; atherosclerosis;
 KW hepatic glucose production; glucose-metabolism-related disorder;
 KW type-2 diabetes; glitaxzone-resistant diabetes; human;
 KW glucose-6-phosphatase; antisense inhibition; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004091515-A2.
 XX
 PD 28-OCT-2004.
 XX
 PF 09-APR-2004; 2004WO-US011255.
 XX
 PR 09-APR-2003; 2003US-0462097P.
 PR 10-APR-2003; 2003US-0461915P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 PR 08-MAR-2004; 2004WO-US007070.
 PR 05-APR-2004; 2004WO-US010586.
 XX
 PA (ALNY-) ALNYLAM PHARM INC.
 XX
 PI Manoharan M, Elbashir S, Harborth J;
 XX
 DR WPI; 2004-766693/75.
 XX

PT New interference RNA agent comprising sense sequence and antisense
PT sequence having cholesterol moieties, useful for reducing apoB-100 levels
PT or glucose-6-phosphatase levels.

XX Example 4; SEQ ID NO 5367; 324pp; English.

XX The invention describes an interference RNA (irna) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence
CC comprises one or more cholesterol moieties, and the antisense sequence
CC targets a human gene sequence. The following are disclosed: a
CC pharmaceutical composition comprising (I); and a device for administering
CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC any one of sequences as given in the specification. (I) comprises a
CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC (I) further comprises a second cholesterol moiety. The second cholesterol
CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC duplex region of (I) is 19 nucleotides in length. The subject is
CC suffering from a disorder having elevated or otherwise unwanted
CC expression of apo-B-100, elevated or otherwise unwanted levels of
CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC combined hyperlipidaemia or acquired hyperlipidaemia),
CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC artery disease, coronary heart disease and atherosclerosis, preferably
CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC to inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
CC (I) has endonuclease or exonuclease resistance. This sequence represents
CC a human glucose-6-phosphatase palindromic sequence that may be useful as
CC a target for antisense inhibition.

XX SQ Sequence 19 BP; 1 A; 1 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAAAAAGAAAAA 2725
DB 19 CTCAAAAAGAAAAA 1

RESULT 1523

ADX86501

ID ADX86501 standard; RNA; 19 BP.

XX AC ADX86501;

XX DT 05-MAY-2005 (first entry)

XX DE XIAP targeting siRNA SEQ ID NO 372.

XX KW ds; primer; short interfering RNA; siRNA;
XX KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
XX KW cytostatic; cancer; gene silencing.

XX OS Synthetic.

XX PN WO2005014811-A2.

XX PD 17-FEB-2005.

XX PF 06-AUG-2004; 2004WO-US025589.

XX PR 08-AUG-2003; 2003US-0493561P.

XX PR 23-OCT-2003; 2003US-00693059.

XX PR 24-NOV-2003; 2003US-00720448.

XX PR 03-DEC-2003; 2003US-00727780.

XX PR 14-JAN-2004; 2004US-00757803.

XX PR 10-FEB-2004; 2004US-0543480P.

XX PR 13-FEB-2004; 2004US-00780447.

XX PR 16-APR-2004; 2004US-00826966.

PR 30-APR-2004; 2004WO-US013456.

PR 24-MAY-2004; 2004WO-US016390.

XX PA (SIRN-) SIRNA THERAPEUTICS INC.

XX PI Meswigen J, Chowira BM;

XX DR WPI; 2005-163247/17.

XX DR WPI; 2005-163247/17.

PT New chemically synthesized double stranded short interfering nucleic acid
PT that directs cleavage of an X-linked inhibitor of apoptosis protein
PT (XIAP) RNA via RNA interference, useful in preparing a composition for
PT treating cancer.

XX Claim 33; SEQ ID NO 372; 202pp; English.

XX This invention describes novel chemically synthesized double stranded
CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC (RNAi), where each strand of the siRNA molecule is about 18-23
CC nucleotides in length and one strand of the siRNA molecule comprises
CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC The siRNA molecules can be used to make a cytostatic composition
CC comprising the siRNA molecule in a carrier or diluent. The sense and
CC antisense strands are connected via a linker molecule. The pyrimidine
CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC The purine nucleotides in the sense region are 2'-deoxy purine
CC nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
CC pyrimidine nucleotides. The fragment comprising the sense region includes
CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
CC ends of the fragment comprising the sense region. The terminal cap moiety
CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC nucleotides present in the antisense region comprise 2'-deoxy- purine
CC nucleotides. The antisense region comprises a phosphorothioate
CC internucleotide linkage at the 3' end of the antisense region. The
CC antisense region comprises a glyceryl modification at a 3' end of the
CC antisense region. About 19 nucleotides of each fragment of the siRNA
CC molecule are base-paired to the complementary nucleotides of the other
CC fragment of the siRNA. The 5'-end of the fragment comprising the
CC antisense region optionally includes a phosphate group. The XIAP RNA
CC comprises Genbank Accession No. NM_001167. The chemically synthesized
CC double stranded short interfering nucleic acid (siRNA) molecule is useful
CC in preparing a composition for treating cancer. ADX86130-ADX87180
CC represent siRNA molecules which are used in RNA interference mediated
CC inhibition of XIAP gene expression.

XX SQ Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

DB 1 AAAAAAAAAAAUACAAA 19

RESULT 1524

ADX86332/c

ID ADX86332 standard; RNA; 19 BP.

XX AC ADX86332;

XX DT 05-MAY-2005 (first entry)

XX DE XIAP targeting siRNA SEQ ID NO 203.

XX KW ds; primer; short interfering RNA; siRNA;

XX KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;

XX KW cytostatic; cancer; gene silencing.

OS	Synthetic.	
XX	WO2005014811-A2.	
PN	17-FEB-2005.	
XX		
PD		
XX		
PF	06-AUG-2004; 2004WO-US025589.	
XX		
PR	08-AUG-2003; 2003US-0493561P.	
XX	23-OCT-2003; 2003US-00693059.	
PR	24-NOV-2003; 2003US-00720448.	
PR	03-DEC-2003; 2003US-00727780.	
PR	14-JAN-2004; 2004US-00757803.	
PR	10-FEB-2004; 2004US-0543480P.	
PR	13-FEB-2004; 2004US-00780447.	
PR	16-APR-2004; 2004US-00826966.	
PR	30-APR-2004; 2004WO-US013456.	
PR	24-MAY-2004; 2004WO-US016390.	
XX		
PA	(SIRN-) SIRNA THERAPEUTICS INC.	
XX		
PI	Mcswiggen J, Chowrira BM;	
XX		
XX	WPI; 2005-163247/17.	
DR		
XX	New chemically synthesized double stranded short interfering nucleic acid	
PT	that directs cleavage of an X-linked inhibitor of apoptosis protein	
PT	(XIAP) RNA via RNA interference, useful in preparing a composition for	
PT	treating cancer.	
XX		
PS	Claim 33; SEQ ID NO 203; 202pp; English.	
XX		
CC	This invention describes novel chemically synthesized double stranded	
CC	short interfering nucleic acid (siRNA) molecules which direct cleavage of	
CC	a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference	
CC	(RNAi), where each strand of the siRNA molecule is about 18-23	
CC	nucleotides in length and one strand of the siRNA molecule comprises	
CC	nucleotide sequence having sufficient complementarity to the XIAP RNA.	
CC	The siRNA molecules can be used to make a cytostatic composition	
CC	comprising the siRNA molecule in a carrier or diluent. The sense and	
CC	antisense strands are connected via a linker molecule. The pyrimidine	
CC	nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.	
CC	The purine nucleotides in the sense region are 2'-deoxy purine	
CC	nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro	
CC	pyrimidine nucleotides. The fragment comprising the sense region includes	
CC	a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'	
CC	ends of the fragment comprising the sense region. The terminal cap moiety	
CC	is an inverted deoxy abasic moiety. The pyrimidine nucleotides and the	
CC	antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the	
CC	purine nucleotides are 2'-O-methyl purine nucleotides. The purine	
CC	nucleotides present in the antisense region comprise 2'-deoxy- purine	
CC	nucleotides. The antisense region comprises a phosphorothioate	
CC	internucleotide linkage at the 3' end of the antisense region. The	
CC	antisense region comprises a glyceryl modification at a 3' end of the	
CC	antisense region. About 19 nucleotides of each fragment of the siRNA	
CC	molecule are base-paired to the complementary nucleotides of the other	
CC	fragment of the siRNA. The 5'-end of the fragment comprising the	
CC	antisense region optionally includes a phosphate group. The XIAP RNA	
CC	comprises Genbank Accession No. NM.001167. The chemically synthesized	
CC	double stranded short interfering nucleic acid (siRNA) molecule is useful	
CC	in preparing a composition for treating cancer. ADX86130-ADX87180	
CC	represent siRNA molecules which are used in RNA interference mediated	
CC	inhibition of XIAP gene expression.	
XX		
SQ	Sequence 19 BP; 4 A; 0 C; 2 G; 0 T; 13 U; 0 Other;	
	Query Match 0.6%; Score 15.8; DB 1; Length 19;	
	Best Local Similarity 89.5%; Pred. No. 1.2e+03;	
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
Qy	2703 TGTTACTAAAAA 2721	
Db	19 TCTACTAAATAATATAAAAA 1	

RESULT 1525	
ADX86799	
ID	ADX86799 standard; RNA; 19 BP.
XX	
AC	ADX86799;
XX	
DT	05-MAY-2005 (first entry)
XX	
DE	XIAP targeting siRNA SEQ ID NO 670.
XX	
KW	ds; primer; short interfering RNA; siRNA;
KW	X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
KW	cytostatic; cancer; gene silencing.
XX	
OS	Synthetic.
XX	
PN	WO2005014811-A2.
XX	
PD	17-FEB-2005.
XX	
PF	06-AUG-2004; 2004WO-US025589.
XX	
PR	08-AUG-2003; 2003US-0493561P.
PR	23-OCT-2003; 2003US-00693059.
PR	24-NOV-2003; 2003US-00720448.
PR	03-DEC-2003; 2003US-00727780.
PR	14-JAN-2004; 2004US-00757803.
PR	10-FEB-2004; 2004US-0543480P.
PR	13-FEB-2004; 2004US-00780447.
PR	16-APR-2004; 2004US-00826966.
PR	30-APR-2004; 2004WO-US013456.
PR	24-MAY-2004; 2004WO-US016390.
XX	
PA	(SIRN-) SIRNA THERAPEUTICS INC.
XX	
PI	Mcswiggen J, Chowrira BM;
DR	WPI; 2005-163247/17.
XX	
PT	New chemically synthesized double stranded short interfering nucleic acid
PT	that directs cleavage of an X-linked inhibitor of apoptosis protein
PT	(XIAP) RNA via RNA interference, useful in preparing a composition for
PT	treating cancer.
XX	
PS	Claim 33; SEQ ID NO 670; 202pp; English.
XX	
CC	This invention describes novel chemically synthesized double stranded
CC	short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC	a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC	(RNAi), where each strand of the siRNA molecule is about 18-23
CC	nucleotides in length and one strand of the siRNA molecule comprises
CC	nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC	The siRNA molecules can be used to make a cytostatic composition
CC	comprising the siRNA molecule in a carrier or diluent. The sense and
CC	antisense strands are connected via a linker molecule. The pyrimidine
CC	nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC	The purine nucleotides in the sense region are 2'-deoxy purine
CC	nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
CC	pyrimidine nucleotides. The fragment comprising the sense region includes
CC	a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
CC	ends of the fragment comprising the sense region. The terminal cap moiety
CC	is an inverted deoxy abasic moiety. The pyrimidine nucleotides and the
CC	antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC	purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC	nucleotides present in the antisense region comprise 2'-deoxy- purine
CC	nucleotides. The antisense region comprises a phosphorothioate
CC	internucleotide linkage at the 3' end of the antisense region. The
CC	antisense region comprises a glyceryl modification at a 3' end of the
CC	antisense region. About 19 nucleotides of each fragment of the siRNA
CC	molecule are base-paired to the complementary nucleotides of the other
CC	fragment of the siRNA. The 5'-end of the fragment comprising the
CC	antisense region optionally includes a phosphate group. The XIAP RNA
CC	comprises Genbank Accession No. NM.001167. The chemically synthesized
CC	double stranded short interfering nucleic acid (siRNA) molecule is useful
CC	in preparing a composition for treating cancer. ADX86130-ADX87180
CC	represent siRNA molecules which are used in RNA interference mediated
CC	inhibition of XIAP gene expression.
XX	

PT New chemically synthesized double stranded short interfering nucleic acid
 PT that directs cleavage of an X-linked inhibitor of apoptosis protein
 PT (XIAP) RNA via RNA interference, useful in preparing a composition for
 PT treating cancer.

XX Claim 33; SEQ ID NO 296; 202pp; English.

XX This invention describes novel chemically synthesized double stranded
 CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
 CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
 CC (RNAi), where each strand of the siRNA molecule is about 18-23
 CC nucleotides in length and one strand of the siRNA molecule comprises
 CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
 CC The siRNA molecules can be used to make a cytostatic composition
 CC comprising the siRNA molecule in a carrier or diluent. The sense and
 CC antisense strands are connected via a linker molecule. The pyrimidine
 CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
 CC The purine nucleotides in the sense region are 2'-deoxy purine
 CC nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
 CC pyrimidine nucleotides. The fragment comprising the sense region includes
 CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
 CC ends of the fragment comprising the sense region. The terminal cap moiety
 CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
 CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
 CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
 CC nucleotides present in the antisense region comprise 2'-deoxy- purine
 CC nucleotides. The antisense region comprises a phosphorothioate
 CC internucleotide linkage at the 3' end of the antisense region. The
 CC antisense region comprises a glyceryl modification at a 3' end of the
 CC antisense region. About 19 nucleotides of each fragment of the siRNA
 CC molecule are base-paired to the complementary nucleotides of the other
 CC fragment of the siRNA. The 5'-end of the fragment comprising the
 CC antisense region optionally includes a phosphate group. The XIAP RNA
 CC comprises Genbank Accession No. NM 001167. The chemically synthesized
 CC double stranded short interfering nucleic acid (siRNA) molecule is useful
 CC in preparing a composition for treating cancer. ADX86130-ADX87180
 CC represent siRNA molecules which are used in RNA interference mediated
 CC inhibition of XIAP gene expression.

XX Sequence 19 BP; 17 A; 0 C; 1 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

DB 1 AAAAAAAAAAGAAUA 19

RESULT 1529

ADX86892/C

ID ADX86892 standard; RNA; 19 BP.

XX ADX86892;

XX 05-MAY-2005 (first entry)

XX XIAP targeting siRNA SEQ ID NO 763.

XX ds; primer; short interfering RNA; siRNA;
 KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
 KW cytostatic; cancer; gene silencing.

XX Synthetic.

XX WO2005014811-A2.

XX 17-FEB-2005.

XX 06-AUG-2004; 2004WO-US025589.

XX 08-AUG-2003; 2003US-0493561P.

PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Chowkira BM;

XX WPI; 2005-163247/17.

XX New chemically synthesized double stranded short interfering nucleic acid
 PT that directs cleavage of an X-linked inhibitor of apoptosis protein
 PT (XIAP) RNA via RNA interference, useful in preparing a composition for
 PT treating cancer.

XX Claim 33; SEQ ID NO 763; 202pp; English.

XX This invention describes novel chemically synthesized double stranded
 CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
 CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
 CC (RNAi), where each strand of the siRNA molecule is about 18-23
 CC nucleotides in length and one strand of the siRNA molecule comprises
 CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
 CC The siRNA molecules can be used to make a cytostatic composition
 CC comprising the siRNA molecule in a carrier or diluent. The sense and
 CC antisense strands are connected via a linker molecule. The pyrimidine
 CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
 CC The purine nucleotides in the sense region are 2'-deoxy-2'-fluoro
 CC pyrimidine nucleotides. The fragment comprising the sense region includes
 CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
 CC ends of the fragment comprising the sense region. The terminal cap moiety
 CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
 CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
 CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
 CC nucleotides present in the antisense region comprise 2'-deoxy- purine
 CC nucleotides. The antisense region comprises a phosphorothioate
 CC internucleotide linkage at the 3' end of the antisense region. The
 CC antisense region comprises a glyceryl modification at a 3' end of the
 CC antisense region. About 19 nucleotides of each fragment of the siRNA
 CC molecule are base-paired to the complementary nucleotides of the other
 CC fragment of the siRNA. The 5'-end of the fragment comprising the
 CC antisense region optionally includes a phosphate group. The XIAP RNA
 CC comprises Genbank Accession No. NM 001167. The chemically synthesized
 CC double stranded short interfering nucleic acid (siRNA) molecule is useful
 CC in preparing a composition for treating cancer. ADX86130-ADX87180
 CC represent siRNA molecules which are used in RNA interference mediated
 CC inhibition of XIAP gene expression.

XX Sequence 19 BP; 1 A; 1 C; 0 G; 0 T; 17 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

DB 19 AAAAAAAAAAGAAATTA 1

RESULT 1529

AEB04633/C

ID AEB04633 standard; RNA; 19 BP.

XX AEB04633;

XX 08-SEP-2005 (first entry)

XX Human IL-4R transcript target sequence/siRNA sense strand, SEQ ID:389.
 DE RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 XX hyperproliferation; neoplasm; cytostatic; viral infection; infection;
 KW virucide; inflammation; antiinflammatory; autoimmune disease;
 KW immune disorder; immunosuppressive; pulmonary disease;
 KW respiratory disease; respiratory-gen.; cardiovascular disease;
 KW cardiovascular-gen.; neurological disease; neuroprotective;
 KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
 KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
 KW ocular disease; ophthalmological; reproductive disorder; infertility;
 KW antiinfertility; gynecology and obstetrics; andrology;
 KW mitochondrial disease; prion disease; degeneration;
 KW interleukin-4 receptor; IL-4 receptor; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2005143333-A1.
 XX
 PD 30-JUN-2005.
 XX
 PF 09-JUN-2004; 2004US-00863973.
 XX
 PR 18-MAY-2001; 2001US-0292217P.
 PR 20-JUN-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0362016P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 20-MAY-2002; 2002WO-US015876.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 14-FEB-2003; 2003WO-US004566.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 30-FEB-2003; 2003WO-US005346.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-0044853.
 PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 PI Richards I, Polisky B, Mcswiggen J;
 XX
 DR WPI; 2005-457799/46.
 XX
 PT Novel chemically synthesized double stranded short interfering nucleic
 PT acid molecule useful for cleaving interleukin 4 receptor RNA through RNA
 PT interference.
 XX
 XX Claim 33; SEQ ID NO 389; 128pp; English.
 XX
 CC The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of receptors for interleukin-
 CC 4 (e.g., IL-4 receptor (IL-4R), IL-13 receptor (IL-13R) and IL-2 receptor
 CC gamma (IL-2RG)) by RNA interference. The invention also relates to
 CC similar siNAs which interfere with the expression of the ligands for
 CC these receptors, namely IL-4 and IL-13. The siNAs of the invention may or
 CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can
 CC be chemically modified and may be double or single stranded. They further
 CC comprise sense and antisense regions, or alternatively are assembled from
 CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,

CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,
 CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also
 CC relates to pharmaceutical compositions comprising an siNA targeted to
 CC human IL-4R (RefSeq accession number NM 000418), IL-13R, IL-2RG, IL-4 or
 CC IL-13, especially the siRNAs shown in AEB04245-AEB06055. The invention
 CC further discloses expression vectors and host cells comprising an siNA of
 CC the invention. The siNAs exhibit increased resistance to nuclease
 CC degradation compared to the prior art. The siNAs of the invention can be
 CC used to modulate expression of their target genes in cells, tissue
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
 CC conditions. They may be used in the treatment of interleukin-related
 CC proliferative conditions, viral infection, inflammatory conditions,
 CC autoimmune diseases, respiratory and pulmonary diseases (e.g., asthma,
 CC chronic obstructive pulmonary disease (COPD), allergies), cardiovascular
 CC diseases, neurological diseases, renal diseases, ocular diseases, liver
 CC diseases, mitochondrial diseases, endocrine diseases, prion diseases and
 CC reproduction-related conditions. The siNAs may also be used in drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the sense strand of a human IL-4R-targeted double-stranded
 CC siRNA, which is identical to the human IL-4R transcript target sequence.
 XX
 SQ Sequence 19 BP; 6 A; 8 C; 4 G; 0 T; 1 U; 0 Other;
 Query Match 0.6%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1280 GGGGGCTTTGACATATCCT 1298
 Db 19 GGGGGCTTTGGCATGTCCT 1
 RESULT 1530
 AEB04833
 ID AEB04833 standard; RNA; 19 BP.
 XX
 AC AEB04833;
 XX
 DT 08-SEP-2005 (first entry)
 XX
 XX Human IL-4R siRNA antisense strand, SEQ ID:589.
 XX
 KW RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW hyperproliferation; neoplasm; cytostatic; viral infection; infection;
 KW virucide; inflammation; antiinflammatory; autoimmune disease;
 KW immune disorder; immunosuppressive; pulmonary disease;
 KW respiratory disease; respiratory-gen.; cardiovascular disease;
 KW cardiovascular-gen.; neurological disease; neuroprotective;
 KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
 KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
 KW ocular disease; ophthalmological; reproductive disorder; infertility;
 KW antiinfertility; gynecology and obstetrics; andrology;
 KW mitochondrial disease; prion disease; degeneration;
 KW interleukin-4 receptor; IL-4 receptor; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2005143333-A1.
 XX
 PD 30-JUN-2005.
 XX
 PF 09-JUN-2004; 2004US-00863973.
 XX
 PR 18-MAY-2001; 2001US-0292217P.
 PR 20-JUL-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0362016P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 20-MAY-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 14-FEB-2003; 2003WO-US004566.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 30-FEB-2003; 2003WO-US005346.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-0044853.
 PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 PI Richards I, Polisky B, Mcswiggen J;
 XX
 DR WPI; 2005-457799/46.
 XX
 PT Novel chemically synthesized double stranded short interfering nucleic
 PT acid molecule useful for cleaving interleukin 4 receptor RNA through RNA
 PT interference.
 XX
 XX Claim 33; SEQ ID NO 389; 128pp; English.
 XX
 CC The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of receptors for interleukin-
 CC 4 (e.g., IL-4 receptor (IL-4R), IL-13 receptor (IL-13R) and IL-2 receptor
 CC gamma (IL-2RG)) by RNA interference. The invention also relates to
 CC similar siNAs which interfere with the expression of the ligands for
 CC these receptors, namely IL-4 and IL-13. The siNAs of the invention may or
 CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can
 CC be chemically modified and may be double or single stranded. They further
 CC comprise sense and antisense regions, or alternatively are assembled from
 CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,

PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 14-FEB-2003; 2003WO-US004566.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX
XX Richards I, Polisky B, Mcswiggen J;
XX WPI; 2005-457759/46.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
PT acid molecule useful for cleaving interleukin 4 receptor RNA through RNA
PT interference.
XX
XX Claim 33; SEQ ID NO 589; 128pp; English.
XX
XX The invention relates to chemically synthesized short interfering nucleic
CC acids (siRNAs) which downregulate expression of receptors for interleukin-
CC 4 (e.g., IL-4 receptor (IL-4R), IL-13 receptor (IL-13R) and IL-2 receptor
CC gamma (IL-2RG)) by RNA interference. The invention also relates to
CC similar siRNAs which interfere with the expression of the ligands for
CC these receptors, namely IL-4 and IL-13. The siRNAs of the invention may or
CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can
CC be chemically modified and may be double or single stranded. They further
CC comprise sense and antisense regions, or alternatively are assembled from
CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,
CC the siRNAs include short interfering RNA (siRNA), double-stranded RNA,
CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also
CC relates to pharmaceutical compositions comprising an siRNA targeted to
CC human IL-4R (RefSeq accession number NM 000418), IL-13R, IL-2RG, IL-4 or
CC IL-13, especially the siRNAs shown in AEB04245-AEB06055. The invention
CC further discloses expression vectors and host cells comprising an siRNA of
CC the invention. The siRNAs exhibit increased resistance to nuclease
CC degradation compared to the prior art. The siRNAs of the invention can be
CC used to modulate expression of their target genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of interleukin-related
CC conditions. They may be used in the treatment of cancers and other
CC proliferative conditions, viral infection, inflammatory conditions,
CC autoimmune diseases, respiratory and pulmonary diseases (e.g., asthma,
CC chronic obstructive pulmonary disease (COPD), allergies), cardiovascular
CC diseases, neurological diseases, renal diseases, ocular diseases, liver
CC diseases, mitochondrial diseases, endocrine diseases, prion diseases and
CC reproduction-related conditions. The siRNAs may also be used in drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents the antisense strand of a human IL-4R-targeted double-stranded
XX siRNA.
XX
XX Sequence 19 BP; 1 A; 4 C; 8 G; 0 T; 6 U; 0 Other;
SQ

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 57.9%; Pred. No. 1.2e+03;
Matches 11; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 1280 GGGGGCTTTCACATATCCT 1298

Db 1 GGGGGCTTTCACATATCCT 19
RESULT 1531
AEC14670
ID AEC14670 standard; RNA; 19 BP.
XX
XX AEC14670;
XX
XX 20-OCT-2005 (first entry)
XX Human IL-4R siRNA antisense strand, SEQ ID:589.
XX
XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
KW hyperproliferation; neoplasm; cytostatic; viral infection; infection;
KW virucide; inflammation; antiinflammatory; autoimmune disease;
KW immune disorder; immunosuppressive; pulmonary disease;
KW respiratory disease; respiratory-gen.; cardiovascular disease;
KW cardiovascular-gen.; neurological disease; neuroprotective;
KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
KW ocular disease; ophthalmological; reproductive disorder; infertility;
KW antifertility; gynecology and obstetrics; andrology;
KW mitochondrial disease; prion disease; degeneration;
KW interleukin-4 receptor; IL-4 receptor; ss.
XX
XX Homo sapiens.
XX
XX US2005182007-A1.
XX
XX 18-AUG-2005.
XX
XX 20-AUG-2004; 2004US-00922675.
XX
XX 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 17-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 14-FEB-2003; 2003WO-US004566.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
PR 09-JUN-2004; 2004US-00863973.
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX
XX Mcswiggen J, Beigelman L;
XX WPI; 2005-581759/59.
XX
XX New chemically synthesized double stranded siRNA molecule that directs
PT cleavage of an interleukin-13 receptor (IL-13R) RNA via RNA interference,
PT useful in preparing a composition for treating e.g., inflammatory
PT disorders.
PT


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PR 06-MAR-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 17-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 06-MAY-2003; 2003US-00430882.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX
XX Mcswiggen J, Chowrira BM, Haerberli P;
XX WPI; 2005-581760/59.
XX
XX New chemically synthesized double stranded siNA molecule that directs
PT cleavage of a NOGO receptor RNA via RNA interference, useful in preparing
PT a composition for treating e.g., neurological disorders.
XX
XX
XX Claim 33; SEQ ID NO 198; 192pp; English.
XX
XX The invention relates to a novel chemically synthesized double stranded
CC short interfering nucleic acid (siNA) molecule which directs cleavage of
CC a NOGO receptor RNA via RNA interference (RNAi). Each strand of the siNA
CC molecule is 18-23 nucleotides in length. One strand of the siNA molecule
CC comprises a nucleotide sequence having sufficient complementarity to the
CC NOGO receptor RNA. The siNA molecules include short interfering RNA
CC (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA) and short hairpin
CC molecules (shRNA). The invention also includes a composition comprising
CC the siNA molecule in a carrier or diluent. The siNA molecules have
CC neuroprotective activity and may be useful in gene therapy. The double
CC stranded siNA molecules are useful in preparing a composition for
CC treating NOGO receptor-associated disorders, e.g. neurological disorders.
CC This sequence represents a NOGO receptor siRNA molecule antisense strand
CC of the invention.
XX
XX Sequence 19 BP; 4 A; 0 C; 1 G; 0 T; 14 U; 0 Other;
XX
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2723
    ||| ||||| ||||| |||||
Db 19 TTCTTAAAAA 1

RESULT 1535
AED33268
ID AED33268 standard; RNA; 19 BP.
XX
XX AED33268;
AC
XX
XX 15-DEC-2005 (first entry)
DT
XX Human NOGO receptor siRNA SEQ ID NO 99.
DE
XX CNS-gen.; neuroprotective; nootropic; cerebroprotective; vasotropic;
KW

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KW antisense therapy; gene expression; neurological disease;
KW nervous system injury; cerebrovascular ischemia; Alzheimers disease;
KW dementia; multiple sclerosis; NOGO receptor; siRNA;
KW short interfering RNA; RNA interference; gene silencing; ss.
XX
OS Homo sapiens.
XX
XX WO2005045035-A2.
XX
XX 19-MAY-2005.
XX
XX 20-AUG-2004; 2004WO-US026930.
XX
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Chowrira BM, Haerberli P;
XX WPI; 2005-746892/76.
XX
XX Novel chemically synthesized double-stranded short interfering nucleic
PT acid molecule directing cleavage of NOGO (Neurite outgrowth inhibitor)
PT receptor RNA through RNA interference, useful in treating Alzheimer's
PT disease or dementia.
XX
XX Claim 33; SEQ ID NO 99; 206pp; English.
XX
XX The invention describes a chemically synthesized double-stranded short
CC interfering nucleic acid (siNA) molecule (I) directing cleavage of NOGO
CC receptor RNA through RNA interference (RNAi), where each strand of the
CC molecule is 18-23 nucleotides in length, and one strand of the molecule
CC comprises a nucleotide sequence having sufficient complementarity to the
CC NOGO receptor RNA for the siNA molecule to direct cleavage of the NOGO
CC receptor RNA through RNAi. Also described is a composition comprising (I)
CC together with a carrier or diluent. (I) is useful for downregulation or
CC inhibition of expression of NOGO and/or NOGO receptor proteins arising
CC from NOGO and/or NOGO receptor haplotype polymorphism that are associated
CC with a disease or condition (e.g., neurologic diseases, disorders and/or
CC conditions). (I) is useful for treating or preventing central nervous
CC system (CNS) injury, cerebrovascular accident (CVA), stroke, Alzheimer's
CC disease, dementia or multiple sclerosis. (I) is useful as reagents in ex
CC vivo applications e.g., in tissue or cells that are transplanted into a
CC subject for therapeutic effect. This sequence represents a NOGO receptor
CC siRNA.
XX
XX Sequence 19 BP; 14 A; 1 C; 0 G; 0 T; 4 U; 0 Other;
XX
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2723
    : : ||||| |||||
Db 1 UUCUAAAAA 19

RESULT 1536
AED33367/c
ID AED33367 standard; RNA; 19 BP.
XX
XX AED33367;
AC
XX
XX 15-DEC-2005 (first entry)
DT
XX

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```
DE Human NOGO receptor siRNA SEQ ID NO 198.
XX CNS-gen.; neuroprotective; nootropic; cerebroprotective; vasotropic;
KW antisense therapy; gene expression; neurological disease;
KW nervous system injury; cerebrovascular ischemia; Alzheimers disease;
KW dementia; multiple sclerosis; NOGO receptor; siRNA;
KW short interfering RNA; RNA interference; gene silencing; ss.
XX Homo sapiens.
XX WO2005045035-A2.
XX 19-MAY-2005.
XX 20-AUG-2004; 2004WO-US025930.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX Mcswiggen J, Chowrira BM, Haerberli P;
XX WPI; 2005-746892/76.
XX Novel chemically synthesized double-stranded short interfering nucleic
PT acid molecule directing cleavage of NOGO (Neurite outgrowth inhibitor)
PT receptor RNA through RNA interference, useful in treating Alzheimer's
PT disease or dementia.
XX Claim 33; SEQ ID NO 198; 206pp; English.
XX The invention describes a chemically synthesized double-stranded short
CC interfering nucleic acid (siNA) molecule (I) directing cleavage of NOGO
CC receptor RNA through RNA interference (RNAi), where each strand of the
CC molecule is 18-23 nucleotides in length, and one strand of the molecule
CC comprises nucleotide sequence having sufficient complementarity to the
CC NOGO receptor RNA for the siNA molecule to direct cleavage of the NOGO
CC receptor RNA through RNAi. Also described is a composition comprising (I)
CC together with a carrier or diluent. (I) is useful for downregulation or
CC inhibition of expression of NOGO and/or NOGO receptor proteins arising
CC from NOGO and/or NOGO receptor haplotype polymorphism that are associated
CC with a disease or condition (e.g., neurologic diseases, disorders and/or
CC conditions). (I) is useful for treating or preventing central nervous
CC system (CNS) injury, cerebrovascular accident (CVA), stroke, Alzheimer's
CC disease, dementia or multiple sclerosis. (I) is useful as reagents in ex
CC vivo applications e.g., in tissue or cells that are transplanted into a
CC subject for therapeutic effect. This sequence represents a NOGO receptor
CC siRNA.
XX Sequence 19 BP; 4 A; 0 C; 1 G; 0 T; 14 U; 0 Other;
QY Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
DQ 2705 TACTAAAAAATAAAAAA 2723
DB 19 TTCTTAAAAAATAAAAAA 1
RESULT 1537
AEF14493
ID AEF14493 standard; DNA; 19 BP.
XX
XX AEF14493;
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XX 09-MAR-2006 (first entry)
XX Human chondrocyte anabolic stimulation target DNA SEQ ID NO 352.
XX Osteopathic; Nootropic; Neuroprotective; Dermatological;
KW Antiinflammatory; Antiarthritic; Antiarthritic; musculoskeletal disease;
KW chondrocyte anabolic stimulator; ss.
XX Homo sapiens.
XX WO2005124342-A2.
XX 29-DEC-2005.
XX 21-JUN-2005; 2005WO-EP052875.
XX 21-JUN-2004; 2004US-0581568P.
XX (GALA-) GALAPAGOS NV.
XX Vandeghinste N, Tomme PHM, Michiels F, Ma L, Mille-Baker B;
XX Van Es HHG;
XX WPI; 2006-067565/07.
XX Identifying a compound that induces chondrocyte anabolic stimulation,
PT useful for treating osteoarthritis, comprises measuring a compound-
PT polypeptide property related to the anabolic stimulation of chondrocytes.
XX Example 4; SEQ ID NO 352; 179pp; English.
XX The invention relates to a method of identifying a compound that induces
CC chondrocyte anabolic stimulation. The methods and agent are useful for
CC treating and/or preventing a disease involving a systemic or local
CC decrease in cartilage, e.g. osteoarthritis, rheumatoid arthritis,
CC psoriatic arthritis, juvenile rheumatoid arthritis, gouty arthritis,
CC septic or infectious arthritis, reactive arthritis, reflex sympathetic
CC dystrophy, algodystrophy, Tietze syndrome or costal chondritis,
CC fibromyalgia, osteochondritis neurogenic or neuropathic arthritis,
CC arthropathy, osteoarthritis deformans endemica, Meeleni disease,
CC Handigodu disease, degeneration resulting from fibromyalgia, systemic
CC lupus erythematosus, scleroderma, ankylosing spondylitis, hereditary
CC chondrolysis, chondrodysplasias, pseudochondrodysplasias, microtia,
CC anopia, and metaphyseal chondrodysplasia. The agent is useful in the
CC manufacture of a medicament for the treating and/or preventing a disease
CC involving a decrease in mean cartilage thickness, e.g. osteoarthritis,
CC hypercalcaemia of malignancy, multiple myelomatosis, hyperparathyroidism,
CC and hyperthyroidism. The present sequence represents a human chondrocyte
CC anabolic stimulation associated target DNA.
XX Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
QY Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
DQ 2435 CTGAAGAGCAGGAGCTGC 2453
DB 1 CTGAAGAGCAGGAGCTGC 19
RESULT 1538
AAV19118/c
ID AAV19118 standard; DNA; 17 BP.
XX
XX AAV19118;
XX 28-AUG-1998 (first entry)
XX Anchored oligo(T) primer.
XX Secreted apoptosis-related protein; SARP; mSARPI; mouse; prostate cancer;
```

KW breast cancer; diagnosis; gene therapy; PCR; primer; ss.
 OS Synthetic.
 XX WO9813493-A2.
 XX PN
 XX PD 02-APR-1998.
 XX PF 24-SEP-1997; 97WO-US017154.
 XX PR 24-SEP-1996; 96US-0026603P.
 XX PR 11-OCT-1996; 96US-0028363P.
 XX PA (LXRB-) LXR BIOTECHNOLOGY INC.
 XX PI Umansky S, Melkonyan H;
 XX DR WPI; 1998-230704/20.
 XX PT New secreted apoptosis-related proteins - useful for modulating
 PT apoptosis, particularly for treatment of prostatic or breast cancer, also
 PT for diagnosis and monitoring of disease.
 XX PS
 XX PS Example 1; Page 30; 101pp; English.
 XX CC This oligo(T) synthetic oligonucleotide was used for first strand cDNA
 CC synthesis from total RNA isolated from either logarithmically growing or
 CC quiescent 10T1/2 mouse fibroblast cells. It was also used with an
 CC arbitrary d(n10) primer in PCR. The PCR products were used in a
 CC differential display to identify the msarp1 gene (see AAV19112) that
 CC codes for novel murine secreted apoptosis-related protein msarp1 (see
 CC AAW37814). The invention relates to SARP polynucleotides (see also
 CC AAV19113-15) and polypeptides (see also AAW37815-17), antibodies specific
 CC for SARP, and use of such polynucleotides and antibodies in diagnostic
 CC and therapeutic methods, and methods for treating diseases related to the
 CC regulation of SARP expression in tissue and body fluid samples, including
 CC cancers
 XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
 Query Match 0.6%; Score 15.6; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 1.2e+03;
 Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAA 2723
 : |||||
 Db 17 SNAATAAAAAAAAAAAAAA 1
 RESULT 1539
 AAZ89372/c
 ID AAZ89372 standard; DNA; 17 BP.
 XX AC
 XX AC AAZ89372;
 XX DT 15-JUN-2000 (first entry)
 XX DE RNA detecting primer #2.
 XX KW Amplification; detection; gene expression; primer; ss.
 XX OS Unidentified.
 XX SS
 XX PN DE19840731-A1.
 XX PD 09-MAR-2000.
 XX PF 07-SEP-1998; 98DE-01040731.
 XX PR 07-SEP-1998; 98DE-01040731.
 XX PA (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 XX

DR WPI; 2000-257789/23.
 XX Analysis of RNA samples, useful for detection of differential gene
 PT expression uses two differently labeled primers.
 XX PS
 XX PS Disclosure; Page 10; 10pp; German.
 XX CC This invention describes a novel method for analysis of an RNA sample
 CC which comprises amplifying cDNA with first and second differently labeled
 CC primers and analysis of the amplified labeled cDNA. The method is useful
 CC for analyzing differential gene expression, for identifying and/or
 CC characterizing pharmacological activities or for identifying target
 CC genes. The use of different primer combinations allow more cDNAs to be
 CC amplified. The method also provides a more detailed analysis than prior
 CC art methods. This sequence represents a primer used to illustrate the
 CC method of the invention
 XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
 Query Match 0.6%; Score 15.6; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.2e+03;
 Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2723
 : |||||
 Db 16 KAAAAAATAAAAAAAAAA 1
 RESULT 1540
 AAZ25453/c
 ID AAZ25453 standard; DNA; 17 BP.
 XX AC
 XX AC AAA25453;
 XX DT 19-JUL-2000 (first entry)
 XX DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1951.
 XX KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.
 OS Homo sapiens.
 XX XX WO9954459-A2.
 XX PN
 XX PD 28-OCT-1999.
 XX PF 19-APR-1999; 99WO-US008547.
 XX PR 20-APR-1998; 98US-0082404P.
 XX PR 23-JUN-1998; 98US-00103636.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
 PI Matulic-Adamic J;
 XX DR WPI; 2000-013248/01.
 XX PT New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.
 XX PS Claim 77; Page 79; 148pp; English.
 XX CC The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodi)thioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium), or
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or

CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC particularly for identification of therapeutic targets, and as research
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA25993 to AAA26105 represent their corresponding target sequences.
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 CC
 XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

XX SQ Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2721
 ||| |||||
 Db 17 TACAAAAA 1

RESULT 1541
 AAA25452/c
 ID AAA25452 standard; DNA; 17 BP.

XX AC AAA25452;

DT 19-JUL-2000 (first entry)

XX Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1950.

XX Oestrogen receptor; c-ra; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.

XX Homo sapiens.

XX WO9954459-A2.

XX 28-OCT-1999.

XX 19-APR-1999; 99WO-US008547.

XX 20-APR-1998; 98US-0082404P.

XX 23-JUN-1998; 98US-00103636.

XX (RIBO-) RIBOZYME PHARM INC.

XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
 PI Matulic-Adamic J;

XX WPI; 2000-013248/01.

XX New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.

XX Claim 77; Page 79; 148pp; English.

XX The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodithioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to

CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA25993 to AAA26105 represent their corresponding target sequences.
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 CC
 XX Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

XX SQ Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2722
 ||| |||||
 Db 17 ACAAAAA 1

RESULT 1542

ABA91530/c

ID ABA91530 standard; DNA; 17 BP.

XX AC ABA91530;

XX 23-APR-2002 (first entry)

XX DNA-RNA-DNA oligonucleotide AGT02014 used to test RNase H cleavage.

XX DNA-RNA hybrid; RNase H; nucleic acid detection; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc_RNA 8

FT /*tag= a
 /label= RNA

XX WO200206531-A2.

XX 24-JAN-2002.

XX 12-JUL-2001; 2001WO-US022166.

XX 14-JUL-2000; 2000US-00616761.

XX 30-MAR-2001; 2001US-00823647.

XX (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX Dattagupta N;

XX WPI; 2002-171819/22.

XX Probes for detecting target nucleotide sequence in sample, has sequence
 PT that forms hairpin structure having a double-stranded segment and single-
 PT stranded loop collectively forming region complementary to target
 PT sequence.

XX Example 4; Page 49; 72pp; English.

XX The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide
 CC AGT02014. This is one of a set of oligonucleotides (see ABA91527-30) used
 CC to assess the minimum number of ribonucleotides in DNA-RNA chimeric
 CC oligonucleotides required for RNase H cleavage. Each oligonucleotide of
 CC the set had a different number of ribonucleotides, 1 in the present case.
 CC The oligonucleotides were mixed with target DNA oligonucleotide AGT02009
 CC (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30
 CC minutes. The results showed that 4 ribonucleotides were the minimum

CC number for RNA cleavage. The invention provides probes for nucleic acid
 CC hybridisation. The probes form a hairpin structure comprising a double-
 CC stranded stem and a single-stranded loop, and are capable of both
 CC intramolecular and intermolecular hybridisation. The double-stranded stem
 CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to
 CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA
 CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and
 CC can be removed. Arrays and methods for nucleic acid hybridisation using
 CC the probes are provided

XX SQ Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAATAAAAAA 1

RESULT 1543
 AAD44151/C
 ID AAD44151 standard; DNA; 17 BP.
 XX AC AAD44151;
 XX DT 13-DEC-2002 (first entry)
 XX DE Oligo-AT PCR primer #2 used to illustrate the method of the invention.
 XX KW Sequential consensus region-directed amplification; gene expression;
 XX KW disease diagnosis; gene analysis; human; matrix metalloproteinase; PCR;
 XX KW primer; ss.
 XX OS Unidentified.
 XX PN US6277571-B1.
 XX PD 21-AUG-2001.
 XX PF 30-SEP-1998; 98US-00163485.
 XX PR 03-OCT-1997; 97US-00943162.
 XX PR 03-OCT-1997; 97US-0108152P.
 XX PA (UUVI-) UNIV VIRGINIA COMMONWEALTH INTELLECTUAL.
 XX PI Fillmore H, Broadus W, Gillies G;
 XX DR WPI; 2002-412824/44.
 XX PT Sequential consensus region-directed amplification for sorting mixture of
 PT DNAs into 2 or more subsets or distinguishing gene expression patterns in
 PT 2 samples, useful for disease diagnosis and gene analysis.
 XX PS Example; Fig 1D; 19pp; English.
 XX SQ The invention relates to a method of sequential consensus region-directed
 CC amplification for sorting a mixture of DNAs into 2 or more subsets or
 CC distinguishing gene expression patterns in 2 samples. The methods, kits
 CC and oligonucleotides are useful for sorting a mixture of DNAs into 2 or
 CC more subsets or distinguishing gene expression patterns in 2 samples e.g.
 CC for disease diagnosis and gene analysis. The present sequence is oligo At
 CC PCR primer used to illustrate the method of the invention

XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

CC hybridisation. The probes form a hairpin structure comprising a double-
 CC stranded stem and a single-stranded loop, and are capable of both
 CC intramolecular and intermolecular hybridisation. The double-stranded stem
 CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to
 CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA
 CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and
 CC can be removed. Arrays and methods for nucleic acid hybridisation using
 CC the probes are provided

XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1545
 ADB04269/C
 ID ADB04269 standard; DNA; 17 BP.
 XX AC ADB04269;
 XX DT 20-NOV-2003 (first entry)
 XX DE Human MD27 scanning oligonucleotide SEQ ID 5255.
 XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 XX KW developmental disorder; ss.
 XX OS Homo sapiens.
 XX PN EP1281758-A2.
 XX PD 05-FEB-2003.
 XX PF 30-JUL-2002; 2002EP-00016874.
 XX PR 02-AUG-2001; 2001US-00922181.
 XX PA (AEOM-) AEOMICA INC.
 XX PI Shannon M, Gu Y, Nguyen C;
 XX DR WPI; 2003-423107/40.
 XX PT New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 XX PS Example 8; SEQ ID NO 5255; 103pp; English.
 XX CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.

XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1545
 ADB04273/C
 ID ADB04273 standard; DNA; 17 BP.
 XX

```
AC ADB04273;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5259.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MD24; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5259; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2724
DB 17 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1546
ADB04274/c
ID ADB04274 standard; DNA; 17 BP.
XX
XX ADB04274;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5260.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5259; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
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KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5260; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 2 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAA 2723
DB 17 CTCAAAAAAAAAAAAAAAAA 1

RESULT 1547
ADB04270/c
ID ADB04270 standard; DNA; 17 BP.
XX
XX ADB04270;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5256.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
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XX PF 30-JUL-2002; 2002EP-00016874.
XX XX
XX PR 02-AUG-2001; 2001US-00922181.
XX XX
XX XX (AEOM-) AEOMICA INC.
XX PA
XX PI Shannon M, Gu Y, Nguyen C;
XX XX
XX DR WPI; 2003-423107/40.
XX XX
XX XX New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX XX
XX PS Example 8; SEQ ID NO 5256; 103pp; English.
XX XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX XX
XX SQ Sequence 17:BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1548
ABZ61225/c
ID ABZ61225 standard; RNA; 17 BP.
XX
XX AC ABZ61225;
XX XX
XX DT 21-MAR-2003 (first entry)
XX XX
XX DE Human H-Ras DNase target #16.
XX XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200297114-A2.
XX XX
XX PD 05-DEC-2002.
XX XX
XX PF 29-MAY-2002; 2002WO-US015840.
XX XX
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX

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PI Mcswiggen J;
XX XX
XX DR WPI; 2003-140484/13.
XX XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX XX
XX PS Claim 58; Page 111; 185pp; English.
XX XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX XX
XX SQ Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;
XX
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1737 ACCTGAGGCGCCTCCCTG 1753
DB 17 ACCAGAGGCGCCTCCCTG 1

RESULT 1549
ADL49408/c
ID ADL49408 standard; RNA; 17 BP.
XX
XX AC ADL49408;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Human PKR substrate sequence #522.
XX XX
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
XX KW substrate; ds.
XX XX
XX OS Unidentified.
XX XX
XX PN WO200281628-A2.
XX XX
XX PD 17-OCT-2002.
XX XX
XX PF 03-APR-2002; 2002WO-US010512.
XX XX
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX XX
XX DR WPI; 2003-058513/05.
XX XX

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PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
XX Example; SEQ ID NO 11; 104pp; English.
XX
CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide.
XX
SQ Sequence 17 BP; 0 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2723
Db | ||||| ||||| |||||
17 CGAAAAAAGAAAAAAGAAAAA 1

RESULT 1552
ADP86146/C
ID ADP86146 standard; DNA; 17 BP.
XX
AC ADP86146;
XX
DT 09-SEP-2004 (first entry)
XX
DE CpG immunostimulatory oligonucleotide #17.
XX
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma;
KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..17
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT misc_RNA 2
FT /tag= b
FT /label= RNA
XX
PN WO2004053104-A2.
XX
PD 24-JUN-2004.
XX
PF 11-DEC-2003; 2003WO-US039775.
XX
PR 11-DEC-2002; 2002US-0432409P.
XX
PR 25-SEP-2003; 2003US-0506108P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
DR WPI; 2004-487902/46.
XX
PT New oligonucleotides, useful for treating allergy or asthma, viral and

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PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
XX Example; SEQ ID NO 17; 104pp; English.
XX
CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide.
XX
SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAAAGAAAAA 2725
Db | ||||| ||||| |||||
17 AAAAAAAGAAAAAAGAAAAA 1

RESULT 1553
ADP86185/C
ID ADP86185 standard; DNA; 17 BP.
XX
AC ADP86185;
XX
DT 09-SEP-2004 (first entry)
XX
DE CpG immunostimulatory oligonucleotide #56 (DNA-RNA hybrid).
XX
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma;
KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
KW carcinoma; sarcoma; gene therapy; phosphorothioate; DNA-RNA hybrid; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..17
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT misc_RNA 2
FT /tag= b
FT /label= RNA
XX
PN WO2004053104-A2.
XX
PD 24-JUN-2004.
XX
PF 11-DEC-2003; 2003WO-US039775.
XX
PR 11-DEC-2002; 2002US-0432409P.
XX
PR 25-SEP-2003; 2003US-0506108P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
DR WPI; 2004-487902/46.
XX
PT

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XX PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
XX cancer, cervical cancer.
XX PS Example; SEQ ID NO 56; 104pp; English.
XX PS
XX CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'-TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide (DNA-RNA hybrid).
XX CC
XX SQ Sequence 17 BP; 0 A; 0 C; 1 G; 15 T; 1 U; 0 Other;

Query Match      0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1554
ID ADP86184/c
XX ADP86184 standard; DNA; 17 BP.
XX AC ADP86184;
XX CC
XX DT 09-SEP-2004 (first entry)
XX CC
XX DE CpG immunostimulatory oligonucleotide #55 (DNA-RNA hybrid).
XX KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
XX viral infection; bacterial infection; cancer; lymphoma;
XX intrapithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
XX carcinoma; sarcoma; gene therapy; phosphorothioate; DNA-RNA hybrid; ss.
XX OS Unidentified.
XX FH
XX Key Location/Qualifiers
FT modified_base 1..17
FT /*tag= a
FT /mod_base= OTHER
FT /*note= "Phosphorothioate backbone"
FT misc_RNA 3
FT /*tag= b
FT /*label= RNA
XX
XX WO2004053104-A2.
XX
XX PD 24-JUN-2004.
XX
XX PF 11-DEC-2003; 2003WO-US039775.
XX
XX PR 11-DEC-2002; 2002US-0432409P.
XX
XX PR 25-SEP-2003; 2003US-0506108P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX PA Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
XX PI

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XX WPI; 2004-487902/46.
XX DR
XX PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
XX cancer, cervical cancer.
XX PS Example; SEQ ID NO 55; 104pp; English.
XX PS
XX CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'-TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide (DNA-RNA hybrid).
XX CC
XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 15 T; 1 U; 0 Other;

Query Match      0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1555
ADZ30299/c
ID ADZ30299 standard; RNA; 17 BP.
XX AC ADZ30299;
XX CC
XX DT 30-JUN-2005 (first entry)
XX CC
XX DE Human H-Ras substrate RNA sequence SEQ ID NO:1337.
XX KW short interfering RNA; siRNA; RNA interference; gene silencing;
XX cytostatic; cancer; Ras gene; substrate; ss.
XX OS Homo sapiens.
XX FH
XX US2005080031-A1.
XX PD 14-APR-2005.
XX
XX PF 26-NOV-2003; 2003US-00724270.
XX
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 20-JUL-2001; 2001US-0306883P.
XX PR 13-AUG-2001; 2001US-0311865P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 20-MAY-2002; 2002WO-US015876.
XX PR 29-MAY-2002; 2002US-00157580.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.

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PR 09-SEP-2002; 2002US-0409293P.
PR 10-SEP-2002; 2002US-00238700.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 16-APR-2003; 2003US-00417012.
PR 24-APR-2003; 2003US-00422704.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 29-AUG-2003; 2003US-00652791.
PR 23-OCT-2003; 2003US-00693059.
XX
PA (STRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2005-331166/34.
XX
XX Novel double-stranded short interfering RNA molecule having first
XX nucleotide sequence complementary to RNA encoding HER2 or its portion,
XX and second nucleotide sequence having complementarity to first sequence,
XX useful for treating cancer.
XX
XX Example 1; SEQ ID NO 1337; 143pp; English.
XX
XX The invention relates to a double-stranded short interfering RNA (siRNA)
XX molecule (I) comprising a first nucleotide sequence having 19-23
XX nucleotides complementary to an RNA sequence encoding HER2 or its
XX portion, and a second nucleotide sequence having 19-23 nucleotides
XX exhibiting complementarity to the first sequence, and including at least
XX one nucleotide that is not a 2'-OH containing ribonucleotide. Also
XX described is a method of producing a class of nucleic acid-based gene
XX modulating agents that exhibit a high degree of specificity for RNA of a
XX desired target. (I) is useful for modulating HER2 activity in a cell, and
XX for treating diseases or conditions related to levels of HER2 gene
XX expression. (I) is useful for treating cancer, such as pancreatic cancer,
XX bladder cancer, lung cancer, breast cancer or prostate cancer. The
XX present sequence represents a human H-Ras substrate RNA sequence for a
XX DNazyme (ribozyme), which is used in an example from the present
XX invention for the identification of potential target sites in human Ras
XX RNA.
XX
XX Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 1737 ACTGTAGGCGCTCCCTG 1753
XX ||| ||||| |||||
XX Db 17 ACCAGAGGCGCTCCCTG 1
XX
XX RESULT 1556
XX AED81301/c
XX ID AED81301 standard; DNA; 17 BP.
XX AC AED81301;
XX
XX 26-JAN-2006 (first entry)
XX
XX IL-10 expression assay, test oligonucleotide SEQ ID No:59.
XX
XX pharmaceutical; therapeutic; immune stimulation; immune response;
XX allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX immunosuppressive; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO2005111057-A2.
XX
XX 24-NOV-2005.
XX
XX

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PF 04-APR-2005; 2005WO-US011827.
XX
XX 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Vollmer J;
XX
XX WPI; 2005-786756/80.
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
XX autoimmune disease, arthritis, systemic lupus erythematosus, multiple
XX sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 59; 111pp; English.
XX
XX The invention relates to an oligonucleotide having the formula: (a) 5'
XX XYN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
XX denotes the 3' end of the oligonucleotide, where X is a T or modified T
XX nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
XX nucleotide, and N1 and N2 are polynucleotides that do not include a CG
XX dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
XX polynucleotide consisting of the YZ dinucleotide and the N2
XX polynucleotide contains a number of nucleotides that is at most 45% of
XX the number of nucleotides in the oligonucleotide; and (b) 5' XYN1YN2 3'
XX where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
XX end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
XX a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
XX polynucleotide of 5-10 nucleotides, where N1 does not include a CG
XX dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
XX a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
XX pharmaceutical composition comprising the oligonucleotide in combination
XX with a therapeutic agent selected from chemotherapeutic agents,
XX radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
XX (2) a method of specifically increasing interleukin (IL)-10 expression
XX relative to interferon (IFN)-alpha expression in a subject, comprising
XX administering an oligonucleotide or a pharmaceutical composition to the
XX subject in need of increased IL-10 expression relative to IFN-alpha
XX expression; (3) a method of inducing an antigen-specific regulatory T
XX cell response in a subject by administering an immunostimulatory nucleic
XX acid or composition to a subject exposed to an antigen; (4) a method of
XX inducing an antigen-specific regulatory B cell response in a subject by
XX administering an immunostimulatory nucleic acid or composition to a
XX subject exposed to an antigen; (5) a method of treating an allergy or
XX asthma by exposing a subject to an allergen, and administering an
XX immunostimulatory nucleic acid or composition to the subject, where the
XX amount sufficient to prevent or alleviate an allergic response to an
XX allergen in the subject; (6) a method of treating an autoimmune disease
XX in a subject by exposing a subject to a self antigen, and administering
XX an immunostimulatory nucleic acid or composition to the subject, where
XX the immunostimulatory nucleic acid or composition is administered in an
XX amount sufficient to prevent or treat an autoimmune disease in the
XX subject; and (7) a method of reducing an antigen-specific response to an
XX implant in a subject by exposing a subject to an implant antigen, and
XX administering an immunostimulatory nucleic acid or composition to the
XX subject, where the immunostimulatory nucleic acid or composition is
XX administered in an amount sufficient to prevent or reduce an antigen-
XX specific response to the implant in the subject. The oligonucleotide
XX includes at least 1 modified internucleotide linkage such as a
XX phosphorothioate linkage. The oligonucleotide, methods and compositions
XX of the invention are useful for treating allergies, asthma, autoimmune
XX diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
XX Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
XX neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
XX hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
XX temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
XX vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
XX disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
XX hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
XX Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
XX disease of the adrenal gland, rheumatoid arthritis, scleroderma,
XX

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CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
XX invention.
SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAA 1

RESULT 1557
AED81286/c
ID AED81286 standard; DNA; 17 BP.
XX
AC AED81286;
XX
DT 26-JAN-2006 (first entry)
XX
DE IL-10 expression assay, test oligonucleotide SEQ ID No:44.
XX
KW pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO2005111057-A2.
XX
PD 24-NOV-2005.
XX
PF 04-APR-2005; 2005WO-US011827.
XX
PR 02-APR-2004; 2004US-0558951P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Vollmer J;
XX
DR WPI; 2005-786756/80.
XX
PT New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 44; 111pp; English.
XX
CC The invention relates to an oligonucleotide having the formula: (a) 5'
CC XN1YZN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1YZN2 3'
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression

CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by
CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen, and administering an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or alleviate an allergic response to an
CC allergen in the subject; (6) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
XX invention.
SQ Sequence 17 BP; 0 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2707 CTAATAAAAAAAAAAAAA 2723
DB 17 CGAAAAAAAAAAAAAAAA 1

RESULT 1558
AED81270/c
ID AED81270 standard; DNA; 17 BP.
XX
AC AED81270;
XX
DT 26-JAN-2006 (first entry)
XX
DE IL-10 expression assay, test oligonucleotide SEQ ID No:28.
XX
KW pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO2005111057-A2.
XX
PD 24-NOV-2005.

XX 04-APR-2005; 2005WO-US011827.
 XX 02-APR-2004; 2004US-0558951P.
 XX (COLE-) COLEY PHARM GROUP INC.
 XX (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Vollmer J;
 XX WPI; 2005-786756/80.
 XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
 XX Example; SEQ ID NO 28; 11pp; English.
 XX The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
 CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
 CC polynucleotide consisting of the YZ dinucleotide and the N2
 CC polynucleotide contains a number of nucleotides that is at most 45% of
 CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
 CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
 CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
 CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
 CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
 CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
 CC pharmaceutical composition comprising the oligonucleotide in combination
 CC with a therapeutic agent selected from chemotherapeutic agents,
 CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
 CC (2) a method of specifically increasing interleukin (IL)-10 expression
 CC relative to interferon (IFN)-alpha expression in a subject, comprising
 CC administering an oligonucleotide or a pharmaceutical composition to the
 CC subject in need of increased IL-10 expression relative to IFN-alpha
 CC expression; (3) a method of inducing an antigen-specific regulatory T
 CC cell response in a subject by administering an immunostimulatory nucleic
 CC acid or composition to a subject exposed to an antigen; (4) a method of
 CC inducing an antigen-specific regulatory B cell response in a subject by
 CC administering an immunostimulatory nucleic acid or composition to a
 CC subject exposed to an antigen; (5) a method of treating an allergy or
 CC asthma by exposing a subject to an allergen, and administering an
 CC immunostimulatory nucleic acid or composition to the subject, where the
 CC immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or treat an autoimmune disease in the
 CC subject; and (7) a method of reducing an antigen-specific response to an
 CC implant in a subject by exposing a subject to an implant antigen, and
 CC administering an immunostimulatory nucleic acid or composition to the
 CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune

CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.
 XX Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 XX
 XX Query Match 0.6%; Score 15.4; DB 1; Length 17;
 XX Best Local Similarity 94.1%; Pred.No. 1.2e+03;
 XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1559
 AED81243/C
 ID AED81243 standard; DNA; 17 BP.
 XX
 XX AC AED81243;
 XX
 XX DT 26-JAN-2006 (first entry)
 XX
 XX DE IL-10 expression assay, test oligonucleotide SEQ ID No:1.
 XX
 XX KW pharmaceutical; therapeutic; immune stimulation; immune response;
 KW allergy; asthma; autoimmune disease; antiasthmatic; anti-allergic;
 KW immunosuppressive; phosphorothioate; ss.
 XX
 XX OS Synthetic.
 XX
 XX PN WO2005111057-A2.
 XX
 XX PD 24-NOV-2005.
 XX
 XX PF 04-APR-2005; 2005WO-US011827.
 XX
 XX PR 02-APR-2004; 2004US-0558951P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 XX (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Vollmer J;
 XX WPI; 2005-786756/80.
 XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
 XX Example; SEQ ID NO 1; 11pp; English.
 XX The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
 CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
 CC polynucleotide consisting of the YZ dinucleotide and the N2
 CC polynucleotide contains a number of nucleotides that is at most 45% of
 CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
 CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
 CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
 CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
 CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
 CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
 CC pharmaceutical composition comprising the oligonucleotide in combination
 CC with a therapeutic agent selected from chemotherapeutic agents,
 CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
 CC (2) a method of specifically increasing interleukin (IL)-10 expression
 CC relative to interferon (IFN)-alpha expression in a subject, comprising
 CC administering an oligonucleotide or a pharmaceutical composition to the
 CC subject in need of increased IL-10 expression relative to IFN-alpha
 CC expression; (3) a method of inducing an antigen-specific regulatory T
 CC cell response in a subject by administering an immunostimulatory nucleic
 CC acid or composition to a subject exposed to an antigen; (4) a method of
 CC inducing an antigen-specific regulatory B cell response in a subject by
 CC administering an immunostimulatory nucleic acid or composition to a
 CC subject exposed to an antigen; (5) a method of treating an allergy or
 CC asthma by exposing a subject to an allergen, and administering an
 CC immunostimulatory nucleic acid or composition to the subject, where the
 CC immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or treat an autoimmune disease in the
 CC subject; and (7) a method of reducing an antigen-specific response to an
 CC implant in a subject by exposing a subject to an implant antigen, and
 CC administering an immunostimulatory nucleic acid or composition to the
 CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune

(2) a method of specifically increasing interleukin (IL)-10 expression relative to interferon (IFN)-alpha expression in a subject, comprising administering an oligonucleotide or a pharmaceutical composition to the subject in need of increased IL-10 expression relative to IFN-alpha expression; (3) a method of inducing an antigen-specific regulatory T cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (4) a method of inducing an antigen-specific regulatory B cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (5) a method of treating an allergy or asthma by exposing a subject to an allergen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or alleviate an allergic response to the allergen in the subject; (6) a method of treating an autoimmune disease in a subject by exposing a subject to a self antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or treat an autoimmune disease in the subject; and (7) a method of reducing an antigen-specific response to an implant in a subject by exposing a subject to an implant antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or reduce an antigen-specific response to the implant in the subject. The oligonucleotide includes at least 1 modified internucleotide linkage such as a phosphorothioate linkage. The oligonucleotide, methods and compositions of the invention are useful for treating allergies, asthma, autoimmune diseases, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's Disease, Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune disease of the adrenal gland, rheumatoid arthritis, scleroderma, polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by an infection e.g. Lyme disease. This sequence represents an oligonucleotide used in experiments in the examples of the present invention.

Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1-2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAGA 1

RESULT 1560

AED81271/c
ID AED81271 standard; DNA; 17 BP.

AC AED81271;

XX 26-JAN-2006 (first entry)

DT IL-10 expression assay, test oligonucleotide SEQ ID No:29.

DE pharmaceutical; therapeutic; immune stimulation; immune response;
XX allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.

OS Synthetic.

PN WO2005111057-A2.

XX

PD 24-NOV-2005.

XX 04-APR-2005; 2005WO-US011827.

XX 02-APR-2004; 2004US-0558951P.

XX (COLE-) COLEY PHARM GROUP INC.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Vollmer J;

XX WPI; 2005-786756/80.

XX New oligonucleotides, useful for treating an allergy or asthma, or an autoimmune disease, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, or Type 1 diabetes mellitus.

PS Example; SEQ ID NO 29; 111pp; English.

CC The invention relates to an oligonucleotide having the formula: (a) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, and N1 and N2 are polynucleotides that do not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3' polynucleotide consisting of the YZ dinucleotide and the N2 polynucleotide contains a number of nucleotides that is at most 45% of the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a polynucleotide of 5-10 nucleotides, where N1 does not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a pharmaceutical composition comprising the oligonucleotide in combination with a therapeutic agent selected from chemotherapeutic agents, radiotherapeutic agents, monoclonal antibodies, and anticancer agents; (2) a method of specifically increasing interleukin (IL)-10 expression relative to interferon (IFN)-alpha expression in a subject, comprising administering an oligonucleotide or a pharmaceutical composition to the subject in need of increased IL-10 expression relative to IFN-alpha expression; (3) a method of inducing an antigen-specific regulatory T cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (4) a method of inducing an antigen-specific regulatory B cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (5) a method of treating an allergy or asthma by exposing a subject to an allergen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or alleviate an allergic response to the allergen in the subject; (6) a method of treating an autoimmune disease in a subject by exposing a subject to a self antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or treat an autoimmune disease in the subject; and (7) a method of reducing an antigen-specific response to an implant in a subject by exposing a subject to an implant antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or reduce an antigen-specific response to the implant in the subject. The oligonucleotide includes at least 1 modified internucleotide linkage such as a phosphorothioate linkage. The oligonucleotide, methods and compositions of the invention are useful for treating allergies, asthma, autoimmune diseases, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune neuropathies such as Guillain-Barre, autoimmune thrombocytopenia, hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's Disease, Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune disease of the adrenal gland, rheumatoid arthritis, scleroderma, polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by an infection e.g. Lyme disease. This sequence represents an oligonucleotide used in experiments in the examples of the present invention.

CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
 CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.

XX SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.2e+03; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1561

AEF63888/c
 ID AEF63888 standard; DNA; 17 BP.

XX AC AEF63888;

XX DT 06-APR-2006 (first entry)

XX DE Carotenoid cleavage dioxygenase associated primer PolyT.

XX KW transformation; genetically engineered microorganism; PCR; primer; ss.

XX OS Synthetic.

XX PN WC2006010930-A2.

XX PD 02-FEB-2006.

XX PF 27-JUL-2005; 2005WO-GB002955.

XX PR 28-JUL-2004; 2004GB-00016832.

XX PR 04-AUG-2004; 2004GB-00017372.

XX PA (DANI-) DANISCO AS.

XX PI Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;

XX PI Qvist I;

XX DR WPI; 2006-125795/13.

XX Host cell for producing carotenoid cleavage compound for flavoring or
 PT perfume applications comprises cell transformed or transfected with
 PT nucleic acid encoding plant-derived carotenoid cleavage dioxygenase.

XX Example; Page 69; 85pp; English.

XX The invention describes a host cell transformed or transfected with a
 CC nucleic acid encoding a plant-derived carotenoid cleavage dioxygenase
 CC (CCD) enzyme. Also described are: (1) a plasmid or vector system
 CC comprising a nucleotide including one of 1617, 1896, 1853, or 1557-amino
 CC acid sequence (SEQ ID No. 1, 3, 5, or 9) given in the specification or a
 CC sequence that is 75% homologous; (2) producing (M1) a carotenoid cleavage
 CC compound comprising treating a carotenoid with a plant-derived CCD; (3)
 CC an enzyme comprising the amino acid sequence corresponding to Rubus
 CC idaeus CCD or its functional equivalent or effective fragment; (4) an
 CC isolated nucleic acid molecule coding for the enzyme, comprising a
 CC nucleotide sequence that is the same as, or complementary to a 2429 base
 CC pair sequence (SEQ ID NO.3) or has at least 75% homology with SEQ ID NO.3
 CC ; and (5) a CrL-e enzyme comprising 527-amino acid sequence (SEQ ID No.
 CC 10) or its effective fragment. The host cell is used for producing a
 CC carotenoid cleavage compound, e.g. alpha or beta ionone, pseudo ionone,
 CC safranal, theaspironone, damascone or damascenone, and for producing GDDP,
 CC beta -carotene, lycopene, or delta carotene for use in flavoring or
 CC perfume applications including e.g. soft drinks, fruit juice or beverage

CC comprising whey protein, health teas, cocoa drinks, milk drinks and
 CC lactic acid bacterial drinks, yogurt, drinking yogurt and wine, bakery
 CC product including bread, Danish pastry, biscuits or cookies,
 CC confectionery product, pharmaceutical composition for therapeutic or
 CC diagnostic purposes. The invention provides reliable and efficient
 CC production of aroma compounds or precursors, particularly carotenoid
 CC cleavage compounds that does not rely solely on chemical synthesis
 CC techniques. This sequence represents a primer associated with the
 CC isolation and cloning of DNA encoding a carotenoid cleavage dioxygenase
 CC (CCD).

XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 1.2e+03;

Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723

Db 17 BBAATAAAAAAAAAAAAA 1

RESULT 1562

AEF88073/c
 ID AEF88073 standard; DNA; 17 BP.

XX AC AEF88073;

XX DT 20-APR-2006 (first entry)

XX DE Poly T primer, to synthesize red raspberry CHS cDNA and rhubarb BAS cDNA.

XX KW Flavor enhancer; food; cosmetics; weight loss;

XX KW naringenin-chalcone synthase; chalcone synthase; benzalacetone synthase;
 XX primer; ss.

XX OS Rubus idaeus; cultivar Tulameen.

XX OS Rheum palmatum.

XX PN GB2416769-A.

XX PD 08-FEB-2006.

XX PF 28-JUL-2004; 2004GB-00016830.

XX PR 28-JUL-2004; 2004GB-00016830.

XX PA (DANI-) DANISCO AS.

XX PI Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;

XX PI Qvist I;

XX DR WPI; 2006-158186/17.

XX Host cell comprising a benzalacetone synthase (BAS) polypeptide sequence
 PT or a 4-coumarate:CoA ligase (4CL) sequence, useful in a bacterial method
 PT of producing benzalacetone and/or raspberry ketone is new.

XX Example; Page 35; 83pp; English.

XX The present invention relates to a host cell comprising a benzalacetone
 CC synthase (BAS) polypeptide and 4-coumarate:CoA ligase (4CL); also referred
 CC as 4-coumaroyl-CoA synthetase; p-coumaroyl CoA ligase; p-coumaryl
 CC coenzyme A synthetase; p-coumaryl CoA synthetase; p-coumaryl-CoA ligase;
 CC feruloyl CoA ligase; hydroxycinnamoyl CoA synthetase; 4-
 CC coumarate:coenzyme A ligase; caffeoyl coenzyme A synthetase; p-
 CC hydroxycinnamoyl coenzyme A synthetase; feruloyl Coenzyme A synthetase;
 CC sinapoyl coenzyme A synthetase; 4-coumaryl-CoA synthetase;
 CC hydroxycinnamate:CoA ligase; p-coumaryl-CoA ligase and p-hydroxycinnamic
 CC acid:CoA ligase; EC 6.2.1.12) sequence in which one or both of the BAS
 CC polypeptide and the 4CL sequence is heterologous to the host cell. BAS is
 CC a member of polyketide synthase family. The host cell also comprises
 CC benzalacetone reductase (BAR) activity. The host cell is useful in the

CC production of benzalacetones and/or raspberry ketones from p-coumaric
CC acid. Raspberry ketone is a flavor component used in the food industry.
CC Benzalacetones and raspberry ketones are useful in aroma formulations in
CC food market, cosmetics, household products such as air fresheners and in
CC weight loss products. The present sequence is a PCR primer used in the
CC synthesis of red raspberry chalcone synthase (CHS) cDNA and benzalacetone
CC synthase (BAS) cDNA, which is used in the production of raspberry ketone.
XX Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2723
DB 17 BBAAAAAATAAAAAAAAAA 1

RESULT 1563
AEF87959/c
ID AEF87959 standard; DNA; 17 BP.
XX
AC AEF87959;
XX
DT 20-APR-2006 (first entry)
XX
DE Poly T primer used to synthesize red raspberry chalcone synthase (CHS).
XX
KW Flavor enhancer; food; cosmetics; weight loss;
KW naringenin-chalcone synthase; chalcone synthase; flavanone synthase;
KW 6'-deoxychalcone synthase; chalcone synthetase; DOCS; primer; ss.
XX
OS Rubus idaeus; cultivar Tulameen.
XX
PN GB2416770-A.
XX
PD 08-FEB-2006.
XX
PF 28-JUL-2004; 2004GB-00016845.
XX
PR 28-JUL-2004; 2004GB-00016845.
XX
PA (DANT-) DANISCO AS.
XX
XX Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;
PI Qvist I;
XX WPI; 2006-139883/15.
XX
PT Host cell used in producing benzalacetone or raspberry ketone comprises
PT chalcone synthase polypeptide sequence and 4-coumarate:CoA ligase
PT sequence.
XX
XX Example; Page 43; 111pp; English.

CC The present invention relates to a host cell comprising a chalcone
CC synthase (CHS; also referred as naringenin-chalcone synthase, flavanone
CC synthase; 6'-deoxychalcone synthase; chalcone synthetase and DOCS; EC
CC 2.3.1.74) polypeptide sequence and 4-coumarate:CoA ligase (4CL; also
CC referred as 4-coumaroyl-CoA synthetase; p-coumaroyl CoA ligase; p-
CC coumaryl coenzyme A synthetase; p-coumaryl CoA synthetase; p-coumaryl-CoA
CC ligase; feruloyl CoA ligase; hydroxycinnamoyl CoA synthetase; 4-
CC coumarate:coenzyme A ligase; caffeoyl coenzyme A synthetase; p-
CC hydroxycinnamoyl coenzyme A synthetase; feruloyl coenzyme A synthetase;
CC sinapoyl coenzyme A synthetase; 4-coumaryl-CoA synthetase;
CC hydroxycinnamate:CoA ligase; p-coumaryl CoA ligase and p-hydroxycinnamic
CC acid:CoA ligase; EC 6.2.1.12) sequence in which one or both are
CC heterologous to the host cell. The host cell also comprises benzalacetone
CC reductase (BAR) activity. The host cell is useful in production of
CC benzalacetone or raspberry ketone from p-coumaric acid. Raspberry ketones
CC is a flavour component used in the food industry. Benzalacetones and
CC raspberry ketones are useful in aroma formulations in food market,

CC cosmetics, household products such as air fresheners and in weight loss
CC products. Chalcone synthase has benzalacetone synthase (BAS) activity.
CC The present sequence is a primer used in the synthesis of red raspberry
CC chalcone synthase (CHS) cDNA.
XX Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2723
DB 17 BBAAAAAATAAAAAAAAAA 1

RESULT 1564
AAQ20109/c
ID AAQ20109 standard; DNA; 18 BP.
XX
AC AAQ20109;
XX
DT 01-APR-1992 (first entry)
XX
DE Cross-linking oligomer 943 to target human TNF Receptor mRNA.
XX
KW deoxyribonucleic acid; major groove; ethanamine group;
KW tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine;
KW cross-linking group; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5 /*tag= a
FT /*mod_base= OTHER
FT /*note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 18
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "N4N4-ethanocytosine"
XX
XX WO9118997-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529346.
XX
XX 25-MAY-1990; 90US-00529346.
XX 14-JAN-1991; 91US-00640654.
XX (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
XX WPI; 1992-007480/01.
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
XX the major groove of duplex DNA and are esp. useful for treating latent
XX infections e.g. HIV.
XX
XX Example 4; Page 27; 42pp; English.

CC The oligomer was designed to target human TNF receptor mRNA beginning at
CC nucleotide 2354 and to covalently cross-link to the target via the N4N4-
CC ethanocytosine group. See also AAQ20108
XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;


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QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAATAAAA 1

RESULT 1565
AAQ20108/c
ID AAQ20108 standard; DNA; 18 BP.
XX AC AAQ20108;
XX DT 01-APR-1992 (first entry)
XX DE Cross-linking oligomer 942 to target human TNF Receptor mRNA.
XX KW deoxyribonucleic acid; major groove; ethanocino group;
XX KW tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine;
XX KW cross-linking group; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 5 /*tag= a
XX FT /mod_base= m5c
XX FT modified_base 18 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "N4N4-ethanocytosine"
XX PN W09118997-A.
XX DT 12-DEC-1991.
XX PF 25-MAY-1990; 90US-00529346.
XX PR 25-MAY-1990; 90US-00529346.
XX PR 14-JAN-1991; 91US-00640654.
XX PA (GILE-) GILEAD SCIE INC.
XX PI Matteucci MD, Krawczyk S;
XX DR WPI; 1992-007480/01.
XX PT New sequence-specific non-photo-activated crosslinking agents - bind to
XX PT the major groove of duplex DNA and are esp. useful for treating latent
XX PT infections e.g. HIV.
XX PS Example 4; Page 27; 42pp; English.
XX CC The oligomer was designed to target human TNF receptor mRNA beginning at
XX CC nucleotide 2354 and to covalently cross-link to the target via the N4N4-
XX CC ethanocytosine group. See also AAQ20109
XX SQ Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAGAAAA 1

RESULT 1566
AAQ25501
ID AAQ25501 standard; DNA; 18 BP.
XX AC AAQ25501;
XX DT 25-MAR-2003 (revised)

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DT 07-DEC-1992 (first entry)
XX Purine rich HUMNFR target duplex sequence.
XX KW Target; human tumour necrosis factor receptor mRNA; AIDS; triplex; HIV;
XX KW hepatitis; malignancy; inflammation; db.
XX OS Synthetic.
XX PN W0209705-A1.
XX PD 11-JUN-1992.
XX PF 25-NOV-1991; 91WO-US008811.
XX PR 23-NOV-1991; 90US-00617907.
XX PR 18-JAN-1991; 91US-00643382.
XX PR 08-APR-1991; 91US-00683420.
XX PR 17-APR-1991; 91US-00686544.
XX PR 17-APR-1991; 91US-00686546.
XX PR 17-APR-1991; 91US-00686547.
XX PR 27-SEP-1991; 91US-00766733.
XX PA (GILE-) GILEAD SCI INC.
XX PF Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX PI WPI; 1992-217083/26.
XX DR New oligomers contg. modified bases - which form a triplex with G-C
XX PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX PT herpes malignancy and inflammation.
XX PS Claim 11; Page 64; 77pp; English.
XX CC The sequence depicts a HUMNFR (tumour necrosis factor receptor) mRNA
XX CC sequence beginning at nucleotide 2354. The sequence is a viral duplex
XX CC sequence contg. a purine-rich region concentrated on one chain of the
XX CC duplex. The sequence may be prepd. by standard DNA synthesis. The HUMNFR
XX CC duplex sequence is used as a target for novel oligomers which are capable
XX CC of forming a triplex at physiological pH by coupling into the major
XX CC groove of the DNA duplex. Three such oligomers TNFR 941-32 are capable of
XX CC forming a triplex with this sequence. The oligomers are used in the
XX CC treatment of inflammation. Similar oligomers may be used to target viral
XX CC DNA duplexes specific for HIV, herpes and other viruses. The triple
XX CC helices form under mild conditions thus assays may be carried out without
XX CC subjecting the test specimen to harsh conditions. The oligomer is able to
XX CC inhibit gene expression, as verified by in vitro systems. See also
XX CC AAQ25452-25500 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 18 BP; 16 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 1 AAAAAAAAAAAAAAAAAA 17

RESULT 1567
AAQ30448/c
ID AAQ30448 standard; DNA; 18 BP.
XX AC AAQ30448;
XX DT 25-MAR-2003 (revised)
XX DT 07-DEC-1992 (first entry)
XX DE Oligomer TNFR943 for forming triplex with HUMNFR target duplex.

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KW Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
KW HPV; malignancy; hepatitis; inflammation, ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 5
XX /tag= a
XX /mod_base= OTHER
FT modified_base 18
FT /note= "N6 methyl-8-oxo-2' deoxyadenine"
FT
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
XX
XX WO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 72; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
XX a purine rich sequence concd. on one strand of the duplex. The oligomer,
XX and others like it are useful in diagnosis and therapy of diseases.
XX characterised by specific DNA duplex targets, e.g. HPV, HER, HIV.
XX hepatitis B, herpes, malignant tumours and inflammation. The triple
XX helices form under mild conditions thus assays may be carried out without
XX subjecting the test specimen to harsh conditions. See also AAQ25452-25501
XX and AAQ30226-447. (Updated on 25-MAR-2003 to correct PN field.) (Updated
XX on 25-MAR-2003 to correct PD field.)
XX
XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAATAAAA 1

RESULT 1568
AAQ30447/C
ID AAQ30447 standard; DNA; 18 BP.
XX
XX AAQ30447;
XX
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)

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XX Oligomer TNFR942 for forming triplex with HUMNFR target duplex.
DE
XX Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
KW HPV; malignancy; hepatitis; inflammation, ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 5
XX /tag= a
XX /mod_base= m5c
FT modified_base 18
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
XX
XX WO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 72; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
XX a purine rich sequence concd. on one strand of the duplex. The oligomer,
XX and others like it are useful in diagnosis and therapy of diseases.
XX characterised by specific DNA duplex targets, e.g. HPV, HER, HIV.
XX hepatitis B, herpes, malignant tumours and inflammation. The triple
XX helices form under mild conditions thus assays may be carried out without
XX subjecting the test specimen to harsh conditions. See also AAQ25452-25501
XX and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated
XX on 25-MAR-2003 to correct PD field.)
XX
XX Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAGAAAA 1

RESULT 1569
AAV54168/C
ID AAV54168 standard; cDNA; 18 BP.
XX
XX AAV54168;
XX
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)

```

DT 21-DEC-1998 (first entry)
XX Nucleotide sequence PCR primer 5.
XX PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
KW
OS Synthetic.
XX
XX WO9839437-A1.
XX
PD 11-SEP-1998.
XX
XX 05-MAR-1998; 98WO-JP000905.
XX
XX 05-MAR-1997; 97JP-00050302.
XX
XX (KYOW) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
XX WPI; 1998-495844/42.
XX
XX Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
PT
XX Example 1; Page 48; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
XX Sequence 18 BP; 0 A; 0 C; 2 G; 16 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2706 ACTAAAAAAAAAAAAA 2722
DB 18 ACAAAAAAAAAAAAAA 2

RESULT 1570
AAV54165/c
ID AAV54165 standard; cDNA; 18 BP.
XX
AC AAV54165;
XX
DT 21-DEC-1998 (first entry)
XX
XX Nucleotide sequence PCR primer 2.
DE
XX PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
KW
OS Synthetic.
XX
XX WO9839437-A1.
XX
PD 11-SEP-1998.
XX
XX 05-MAR-1998; 98WO-JP000905.
XX
XX 05-MAR-1997; 97JP-00050302.
XX
XX (KYOW) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX

DR WPI; 1998-495844/42.
XX
XX Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
XX Example 1; Page 47; 70pp; Japanese.
XX
XX This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
XX Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAAAAAAAAAA 2724
DB 18 TAAAAAAAAAAAAA 2

RESULT 1571
AAV54166/c
ID AAV54166 standard; cDNA; 18 BP.
XX
AC AAV54166;
XX
DT 21-DEC-1998 (first entry)
XX
XX Nucleotide sequence PCR primer 3.
DE
XX PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
KW
OS Synthetic.
XX
XX WO9839437-A1.
XX
PD 11-SEP-1998.
XX
XX 05-MAR-1998; 98WO-JP000905.
XX
XX 05-MAR-1997; 97JP-00050302.
XX
XX (KYOW) KYOWA HAKKO KOGYO KK.
XX
XX Sakaki Y;
XX
XX WPI; 1998-495844/42.
XX
XX Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
XX Example 1; Page 48; 70pp; Japanese.
XX
XX This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
XX Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAAAAAAAAAA 2724

CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases

SQ Sequence 18 BP; 0 A; 0 C; 3 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723

Db 18 CCAAAAAAAAAA 2

RESULT 1575

AAZ90648/c

ID AAZ90648 standard; DNA; 18 BP.

AC AAZ90648;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #9.

CC Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;

KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA 2724

Db 18 TGAIAAAAAAAAAA 2

RESULT 1576

AAZ90644/c

ID AAZ90644 standard; DNA; 18 BP.

AC AAZ90644;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #5.

XX

KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

SQ Sequence 18 BP; 0 A; 0 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2722

Db 18 ACIAAAAAAAAAA 2

RESULT 1577

AAZ90642/c

ID AAZ90642 standard; DNA; 18 BP.

AC AAZ90642;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #3.

KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose

CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes
 XX
 SQ Sequence 18 BP; 0 A; 1 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723
 | | | | | | | | | | | | | | | | | |
 Db 18 CGAAAAA 2

RESULT 1578
 AAZ90641/c
 ID AAZ90641 standard; DNA; 18 BP.

XX AC AAZ90641;

XX DT 13-JUN-2000 (first entry)

XX DE Human adipose tissue gene amplifying primer #2.

XX DE Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

XX OS Homo sapiens.

XX PN JP2000037190-A.

XX PD 08-FEB-2000.

XX PF 23-JUL-1998; 98JP-00225228.

XX PR 23-JUL-1998; 98JP-00225228.

XX PA (NISR) JAPAN TOBACCO INC.

XX DR WPI; 2000-306578/27.

XX PT A physiologically active protein specifically derived from mammal tissue.

XX PS Example 2; Page 18; 50pp; Japanese.

XX CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

XX SQ Sequence 18 BP; 0 A; 0 C; 3 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723
 | | | | | | | | | | | | | | | | | |
 Db 18 CCAAAAAA 2

RESULT 1579
 AAZ90645/c
 ID AAZ90645 standard; DNA; 18 BP.

XX AC AAZ90645;

XX 13-JUN-2000 (first entry)
 DT Human adipose tissue gene amplifying primer #6.
 XX Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

XX OS Homo sapiens.

XX PN JP2000037190-A.

XX PD 08-FEB-2000.

XX PF 23-JUL-1998; 98JP-00225228.

XX PR 23-JUL-1998; 98JP-00225228.

XX PA (NISR) JAPAN TOBACCO INC.

XX DR WPI; 2000-306578/27.

XX PT A physiologically active protein specifically derived from mammal tissue.

XX PS Example 2; Page 18; 50pp; Japanese.

XX CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

XX SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2725
 | | | | | | | | | | | | | | | | | |
 Db 18 AGAAAAA 2

RESULT 1580
 AAZ90647/c
 ID AAZ90647 standard; DNA; 18 BP.

XX AC AAZ90647;

XX DT 13-JUN-2000 (first entry)

XX DE Human adipose tissue gene amplifying primer #8.

XX ADipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

XX OS Homo sapiens.

XX PN JP2000037190-A.

XX PD 08-FEB-2000.

XX PF 23-JUL-1998; 98JP-00225228.

XX PR 23-JUL-1998; 98JP-00225228.

XX PA (NISR) JAPAN TOBACCO INC.

XX DR WPI; 2000-306578/27.

XX PT A physiologically active protein specifically derived from mammal tissue.

```

XX PS Example 2; Page 18; 50pp; Japanese.
XX CC
XX CC The invention relates to identification of genes and proteins of adipose
XX CC tissue relating to obesity, particularly complications of visceral
XX CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
XX CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
XX CC proteins (AAV67598-V67600) are used in the genetic diagnosis, prevention
XX CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
XX CC represent PCR primers amplifying the human adipose tissue genes
XX SQ
XX Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy 2708 TAAAAAATAAAAAAAAAA 2724
Db 18 TCAAAAAAAAAAAAAAAAAA 2

RESULT 1581
AAZ70554/C
ID AAZ70554 standard; DNA; 18 BP.
XX AC AAZ70554;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:4910.
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;
XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX OS Homo sapiens.
XX PN WO9954500-A2.
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX PA (GEST ) GENSET.
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 8; Page 1278; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

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CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
XX SQ Sequence 18 BP; 0 A; 8 C; 1 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy 701 GCAGAGGAAGAACAAAGA 717
Db 18 GGAGAGGAGAGACAGA 2

RESULT 1582
AAH37914/C
ID AAH37914 standard; DNA; 18 BP.
XX AC AAH37914;
XX DT 14-AUG-2001 (first entry)
XX DE SNP specific lower PCR primer SEQ ID 710.
XX KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
XX KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
XX KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
XX KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
XX KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
XX KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200129262-A2.
XX PD 26-APR-2001.
XX PF 13-OCT-2000; 2000WO-US028436.
XX PR 15-OCT-1999; 99US-0160096P.
XX PA (ORCH-) ORCHID BIOSCIENCES INC.
XX PI Picoult-Newburg L, Pohl M;
XX WPI; 2001-250930/30.
XX New genotyping oligonucleotide, useful for detecting the presence,
XX absence or identity of single polynucleotide polymorphism in a nucleic
XX acid sample.
XX Claim 1; Page 53; 83pp; English.
XX
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX primer extension (SNPE) primers, and the sequences of regions flanking
XX sites of single nucleotide polymorphisms SNPs. The present invention
XX includes kits for determining the presence or absence of a SNP, using the
XX oligonucleotides of the invention. The PCR primers are used to amplify a
XX SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX The oligonucleotides are useful for genotyping a nucleic acid sample by
XX performing a single-nucleotide primer extension reaction. The
XX oligonucleotides are useful for determining the presence, absence or
XX identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX assess by association analysis the genotype of an individual or group of
XX individuals, having a pathological phenotypic trait suspected of being
XX caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX traits also include symptoms of or susceptibility to multifactorial
XX disease of which a component is or may be genetic such as autoimmune
XX diseases, including, rheumatoid arthritis, multiple sclerosis,
XX inflammation, cancer, nervous system diseases and infection by pathogenic
XX

```

CC microorganism. The method is also useful in forensic investigations and
 CC paternity analysis. The present sequence represents a PCR primer specific
 CC for a human SNP containing DNA sequence

XX SQ Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 420 GGCCCTGAAACGTGAGG 436
 DB 18 GGCCCTGAAACTTGAGG 2

RESULT 1593

ABQ81304
 ID ABQ81304 standard; DNA; 18 BP.

XX AC ABQ81304;

XX DT 12-DEC-2002 (first entry)

XX DE Cytochrome P450 CYP2A6 sense primer.

XX KW Cytochrome P450; CYP2A6; enzyme; tachyphylaxis; drug tolerance; human;
 KW psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss.

XX OS Homo sapiens.

XX PN WO200245704-A2.

XX PD 13-JUN-2002.

XX PF 04-DEC-2001; 2001WO-GB005369.

XX PR 04-DEC-2000; 2000GB-00029524.

XX PA (MOLE-) MOLECULAR SKINCARE LTD.

XX PI Adcocks C, Bavik C, Cork M, Duff G, Tazi-Ahmini R, Ward S;

XX DR WPI; 2002-713234/77.

XX PT Alleviating or preventing a tachyphylactic response to an agent and
 PT treating psoriasis, comprises administering an antagonist of a metabolic
 PT enzyme, which is induced as a result of exposure to the agent, to a
 PT patient.

XX PS Example 1; Page 75; 136pp; English.

XX CC The present sequence is a sense primer for cytochrome P450 CYP2A6. RT-PCR
 CC was used to characterize metabolic enzyme induction by vitamin D
 CC analogues, corticosteroids and macrolactams in human skin. The invention
 CC provides for the use of antagonists of P450 enzymes for the prevention or
 CC alleviation of a tachyphylactic response to administration of a vitamin D
 CC analogue, corticosteroid or macrolactam to a patient, e.g. for the
 CC treatment of psoriasis. The underlying cause of tachyphylaxis was shown
 CC to be degradation of a drug in the patient, rather than desensitization
 CC or receptor down-regulation. Exposure of a patient to the drug for
 CC extended periods results in an increase in the expression of enzymes
 CC which are capable of metabolizing the drug. A method for treatment of
 CC tachyphylaxis therefore involves inhibiting the induced metabolic enzyme,
 CC especially a P450 cytochrome, by administration of an antagonist of the
 CC enzyme. Detection of an increase in the amount and/or activity of a
 CC metabolic enzyme capable of metabolizing a drug following extended
 CC exposure of a cell from an individual to the drug indicates the increased
 CC likelihood of that individual developing a tachyphylactic response to the
 CC drug

XX SQ Sequence 18 BP; 8 A; 2 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 700 AGCAGAGGAAGCAAG 716
 DB 1 AGCAGAGGAAGCAAG 17

RESULT 1584

AEC52846
 ID AEC52846 standard; DNA; 18 BP.

XX AC AEC52846;

XX DT 17-NOV-2005 (first entry)

XX DE Antisense oligonucleotide targeting human TGF-beta-3 #1244.

XX KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX KW antisense oligonucleotide; ss; cancer; cytostatic.

XX OS Homo sapiens.

XX PN WO2005084712-A2.

XX PD 15-SEP-2005.

XX PF 28-FEB-2005; 2005WO-EP002101.

XX PR 27-FEB-2004; 2004EP-00004478.

XX PR 01-APR-2004; 2004US-0558135P.

XX PA (ANTI-) ANTISENSE PHARMA GMBH.

XX PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;

XX PI Bischof A, Hafner M, Egger T;

XX DR WPI; 2005-630685/54.

XX PT New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.

XX PS Claim 4; Page 72; 106pp; English.

XX CC The invention relates to an antisense oligonucleotide or its active
 CC derivative selected from AEC46374-AEC46395, targeting human interleukin-
 CC 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising a
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the
 CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAVMS), integrins, selectins, metalloproteases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are
 CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,
 CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,

CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilm's tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.
 XX
 SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1204 CAGCCGGCCAGGACCA 1220
 ||||| ||||| ||||| |||||
 Db 1 CAGCAGGGCCAGGACCA 17
 RESULT 1585
 AEC52706
 ID AEC52706 standard; DNA; 18 BP.
 XX
 AC AEC52706;
 XX
 DT 17-NOV-2005 (first entry)
 XX
 DE Antisense oligonucleotide targeting human TGF-beta-3 #1104.
 XX
 KW Transforming growth factor beta; TGF-beta-3; antisense therapy;
 KW antisense oligonucleotide; ss; cancer; cytostatic.
 XX
 OS Homo sapiens.
 XX
 PN WQ2005084712-A2.
 XX
 PD 15-SEP-2005.
 XX
 PF 28-FEB-2005; 2005WO-EP002101.
 XX
 PR 27-FEB-2004; 2004EP-00004478.
 PR 01-APR-2004; 2004US-0558135P.
 XX
 PA (ANTI-) ANTISENSE PHARMA GMBH.
 XX
 PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;
 PI Bischof A, Hafner M, Egger T;
 XX
 DR WPI; 2005-630685/64.
 XX
 XX New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.
 XX
 PS Claim 4; Page 72; 106pp; English.
 XX
 CC The invention relates to an antisense oligonucleotide or its active
 CC derivative selected from AEC46374-AEC46395, targeting human interleukin-
 CC 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the
 CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are

CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,
 CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilm's tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.
 XX
 SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1204 CAGCCGGCCAGGACCA 1220
 ||||| ||||| ||||| |||||
 Db 2 CAGCAGGGCCAGGACCA 18
 RESULT 1586
 AEF69372/c
 ID AEF69372 standard; DNA; 18 BP.
 XX
 AC AEF69372;
 XX
 DT 06-APR-2006 (first entry)
 XX
 DE P. pratense Phl p 1 mutagenic sense PCR primer P 1-18'.
 XX
 KW ss; Phl p 1; allergen; immunoglobulin E; t-lymphocyte; vaccine;
 KW veterinary; Antiallergic; Hyposensitization; mutagenesis; PCR; primer.
 XX
 OS Phleum pratense.
 OS Synthetic.
 PN WQ2006008018-A1.
 XX
 PD 26-JAN-2006.
 XX
 PF 11-JUL-2005; 2005WO-EP007481.
 XX
 PR 21-JUL-2004; 2004DE-10035337.
 XX
 PA (MERE) MERCK PATENT GMBH.
 XX
 PI Fiebig H, Wald M, Nandy A, Kahlert H, Weber B, Cromwell O;
 XX
 DR WPI; 2006-154795/16.
 XX
 PT New variants of group 1 grass pollen allergens, useful for treatment or
 PT prevention of allergy, have reduced immunoglobulin E reactivity while
 PT retaining T cell reactivity, also new DNA encoding them.
 XX
 PS Example 1; SEQ ID NO 19; 72pp; German.
 XX
 CC This invention describes novel hypoallergenic variants of group 1
 CC allergens of Poaceae that have reduced immunoglobulin E (IgE) reactivity
 CC compared with the wild-type allergens but essentially retained reactivity
 CC with T lymphocytes. The invention also describes; a) DNA molecules that
 CC encode the variant allergens; b) a recombinant expression vector
 CC containing DNA encoding the variant allergens functionally linked to an
 CC expression control sequence; c) a host organism transformed with DNA

CC encoding the variant allergens or the expression vector and d) preparing
 CC allergen variants by growing the novel host organisms. The Poaceae group
 CC 1 allergen variants are derived from Phleum pratense; Lolium perenne; Poa
 CC pratensis; Holcus lanatus; Cynodon dactylon; Oryza sativa or Phalaris
 CC aquatica. Several specific amino acid variants are described; e.g. a) the
 CC mature Phl p 1 protein lacking Cys residues at positions 41, 57, 69, 72,
 CC 77, 83 and 139, or these Cys residues replaced by some other amino acid
 CC (specifically Ser) or b) lacking at least one of the regions 1-6; 1-30;
 CC 92-104; 115-119; 175-185 or 213-220. cDNA of wild-type Phl p 1 was
 CC amplified by PCR from total pollen cDNA and a variant in which all 7 Cys
 CC were replaced by Ser was produced by amplification and assembly of
 CC fragments. Deleted versions of this were produced by PCR using primers
 CC that introduce the appropriate truncations. The various allergy variants
 CC are expressed as His fusion products in Escherichia coli and tested
 CC (after immobilization on nitrocellulose) for binding of IgE, isolated
 CC from sera of patients allergic to grass pollen. Reduced IgE binding was
 CC confirmed in an IgE inhibition test and from reduced activation of
 CC basophilic granulocytes. The allergen variants retain T cell activating
 CC properties as shown in a proliferation test on allergen-specific T
 CC lymphocytes from allergic subjects. The variant allergens, encoding DNA
 CC and recombinant expression vectors containing encoding DNA, are useful
 CC for treatment and prevention of allergies induced by Poaceae group 1
 CC allergens, especially as vaccines in human or veterinary medicine. This
 CC sequence represents a mutagenic PCR primer used to create the mutant
 CC Phleum pratense allergens, Phl p 1 NoCys, Phl p 1 NoCys delta213-220, and
 CC Phl p 1 NoCys delta1-6, 115-119, 213-220 from Phleum pratense.
 XX
 SQ Sequence 18 BP; 3 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 381 GCGGGACCTCGGGAT 397
 DB 17 GCGGGACCTCGGGAT 1

RESULT 1587
 AEF93735/c
 ID AEF93735 standard; DNA; 18 BP.
 XX
 AC AEF93735;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Human chromosome 19q r region SNP containing region primer #22.
 XX
 KW SNP detection; prognosis; chromosome 19; r region; ss; PCR; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO2006018023-A2.
 XX
 PD 23-FEB-2006.
 XX
 PF 17-AUG-2005; 2005WO-DK000529.
 XX
 PR 18-AUG-2004; 2004DK-00001249.
 PR 23-FEB-2005; 2005DK-00000274.
 PR 22-JUN-2005; 2005DK-00000918.
 XX
 PA (UYAA-) UNIV AARHUS.
 PA (ARBE-) ARBEJDSMILJOINSTITUTTET.
 XX
 PI Nexø BA, Vogel UB, Borglum A;
 XX
 DR WPI; 2006-173654/18.
 XX
 PT Estimating disease risk of an individual, by assessing a sequence
 PT polymorphism, obtaining a sequence polymorphism response and estimating
 PT disease risk of individual based on the sequence polymorphism response.
 XX

PS Example; Page 68; 139pp; English.
 XX
 CC The invention relates to a method of estimating the disease risk of an
 CC individual which comprises assessing in the genetic material a sequence
 CC polymorphism, obtaining a sequence polymorphism response, and estimating
 CC the disease risk of the individual based on the sequence polymorphism
 CC response. The methods are useful for estimating the disease risk of an
 CC individual comprises, estimating the disease prognosis of an individual
 CC and estimating a treatment response of an individual suffering from
 CC cancer to a disease treatment. The methods can be used for identifying
 CC subjects with increased risk of having or developing cancer. The present
 CC sequence represents a human chromosome 19q r region PCR primer.
 XX
 SQ Sequence 18 BP; 4 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1825 GGAGAAGGAGGTTGCAG 1841
 DB 18 GGAGATGGAGGTTGCAG 2
 RESULT 1588
 AEF93897/c
 ID AEF93897 standard; DNA; 18 BP.
 XX
 AC AEF93897;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Human chromosome 19q r region SNP containing region oligo #58.
 XX
 KW SNP detection; prognosis; chromosome 19; r region; ss; probe; primer;
 KW PCR.
 XX
 OS Homo sapiens.
 XX
 PN WO2006018023-A2.
 XX
 PD 23-FEB-2006.
 XX
 PF 17-AUG-2005; 2005WO-DK000529.
 XX
 PR 18-AUG-2004; 2004DK-00001249.
 PR 23-FEB-2005; 2005DK-00000274.
 PR 22-JUN-2005; 2005DK-00000918.
 XX
 PA (UYAA-) UNIV AARHUS.
 PA (ARBE-) ARBEJDSMILJOINSTITUTTET.
 XX
 PI Nexø BA, Vogel UB, Borglum A;
 XX
 DR WPI; 2006-173654/18.
 XX
 PT Estimating disease risk of an individual, by assessing a sequence
 PT polymorphism, obtaining a sequence polymorphism response and estimating
 PT disease risk of individual based on the sequence polymorphism response.
 XX
 PS Claim 60; Page 98; 139pp; English.
 XX
 CC The invention relates to a method of estimating the disease risk of an
 CC individual which comprises assessing in the genetic material a sequence
 CC polymorphism, obtaining a sequence polymorphism response, and estimating
 CC the disease risk of the individual based on the sequence polymorphism
 CC response. The methods are useful for estimating the disease risk of an
 CC individual comprises, estimating the disease prognosis of an individual
 CC and estimating a treatment response of an individual suffering from
 CC cancer to a disease treatment. The methods can be used for identifying
 CC subjects with increased risk of having or developing cancer. The present
 CC sequence represents a human chromosome 19q r region primer/probe.
 XX

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SQ Sequence 18 BP; 4 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1825 GGAGAGGAGGTTGCAG 1841
Db 18 GGAGATGGAGGTTGCAG 2

RESULT 1589
AAH40922/C
ID AAH40922 standard; DNA; 19 BP.
XX
AC AAH40922;
XX
DT 14-AUG-2001 (first entry)
XX
DE SNP specific lower PCR primer SEQ ID 3718.
XX
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WQ200129262-A2.
XX
PD 26-APR-2001.
XX
PF 13-OCT-2000; 2000WO-USO28436.
XX
PR 15-OCT-1999; 99US-0160096P.
XX
(ORCH-) ORCHID BIOSCIENCES INC.
XX
PI Picoult-Newburg L, Pohl M;
XX
DR WPI; 2001-290930/30.
XX
PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX
PS Claim 1; Page 68; 83pp; English.
XX
CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence

XX SQ Sequence 19 BP; 4 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2460 CCCTCACCAGCACTTC 2476
Db 18 CCTTCACCAAGCACTTC 2

RESULT 1590
ADC49403
ID ADC49403 standard; DNA; 19 BP.
XX
AC ADC49403;
XX
DT 18-DEC-2003 (first entry)
XX
DE Cytochrome P450 gene-specific PCR primer #14.
XX
KW Cytochrome P450 1 A1; cytochrome P450 B10; toxicity estimation; PCR;
KW primer; expression analysis; ss.
XX
OS Unidentified.
XX
PN JP2003093073-A.
XX
PD 02-APR-2003.
XX
PF 26-SEP-2001; 2001JP-00295111.
XX
PR 26-SEP-2001; 2001JP-00295111.
XX
PA (TOKE ) TOSHIBA KK.
XX
DR WPI; 2003-817307/77.
XX
PT New oligonucleotide useful for analyzing expression of cytochrome P450 1
PT A1 gene and cytochrome P450 B10 gene, and estimating toxicity of test
PT agent.
XX
PS Claim 1; SEQ ID NO 14; 29pp; Japanese.
XX
CC The invention comprises primers for analysing the expression of
CC cytochrome P450 1 A1 gene and cytochrome P450 B10 gene, and estimating
CC the toxicity of a test agent. The PCR primers of the invention are useful
CC for analysing tan expression of cytochrome P450 1 A1 gene and P450 2B10
CC gene and estimating the toxicity of a test agent. The present DNA
CC sequence represents a PCR primer of the invention.
XX
SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match      0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 916 CTATGCTACCGAAG 932
Db 3 CTATGCTACAGAAAG 19

RESULT 1591
ADF47937
ID ADF47937 standard; RNA; 19 BP.
XX
AC ADF47937;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human Myc transcript target sequence/s1NA upper strand, SEQ ID 74.
XX

```

KW Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotrophic;
KW nephrotropic; ss.
XX
XX Homo sapiens.
OS
XX WO2003070917-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005326.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-OCT-2002; 2002US-0418655P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689784/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX Example 7; Page 128; 161pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myc-targeted
CC double-stranded siNA, which is identical to the Myc transcript target
CC sequence.
XX
XX Sequence 19 BP; 9 A; 1 C; 8 G; 0 T; 1 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 704 GAGGAGACACAGAGA 720
||||| |||||||
DB 1 GAGGAGGACACAGAGA 17

RESULT 1592

ADP48055/c
ID ADP48055 standard; RNA; 19 BP.
XX
AC ADP48055;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human Myc siNA lower strand, SEQ ID 192.
XX
XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotrophic;
KW nephrotropic; ss.
XX
XX Homo sapiens.
OS
XX WO2003070917-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005326.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-OCT-2002; 2002US-0418655P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689784/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX Example 7; Page 128; 161pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myc-targeted
CC double-stranded siNA, which is identical to the Myc transcript target
CC sequence.
XX
XX Sequence 19 BP; 1 A; 8 C; 1 G; 0 T; 9 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 704 GAGGAAGACCAAGAAGA 720
 DB 19 GAGGAGGAACAAGAAGA 3

RESULT 1593
 ADL25335/C
 ID ADL25335 standard; DNA; 19 BP.
 XX
 AC
 XX
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Intestinal epithelium/peyer's patch M cell-associated PCR primer #480.
 XX
 KW intestinal epithelium cell development; peyer's patch M cell development;
 KW inflammatory bowel disease; Glutenteropathy; infectious disease;
 KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
 KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;
 KW immune system disorder; hypersensitivity; anaphylaxis;
 KW blood group incompatibility; ss; PCR; primer.
 XX
 OS Macaca fascicularis.
 XX
 PN WO200280852-A2.
 XX
 PD 17-OCT-2002.
 XX
 PF 04-APR-2002; 2002WO-US010873.
 XX
 PR 04-APR-2001; 2001US-0281416P.
 XX
 PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
 XX
 PI Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;
 XX WPI; 2003-075470/07.
 XX
 XX Novel isolated or purified polypeptide encoded by genes associated with
 PT intestinal epithelium or M cell development, differentiation or function,
 PT useful for treating autoimmune diseases and infectious diseases.
 XX
 PS Disclosure; SEQ ID NO 845; 152pp; English.
 XX
 CC The invention comprises DNA sequences which are associated with
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the
 CC invention are useful for assessing, modifying, modulating or regulating
 CC intestinal epithelium or M cell development. The DNA sequences of the
 CC invention are also useful in the treatment of: inflammatory bowel
 CC disease, glutenteropathy, infectious diseases, autoimmune diseases
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),
 CC diseases or disorders of the immune system, hypersensitivity,
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence
 CC represents a PCR primer that was used to amplify an intestinal
 CC epithelium/peyer's patch M cell-associated DNA sequence of the invention.
 XX
 SQ Sequence 19 BP; 4 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 1.3e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1825 GGAGAGGAGGTTGCAG 1841
 DB 17 GGAGATGGAGGTTGCAG 1

RESULT 1594
 ADL16519/C
 ID ADO16519 standard; DNA; 19 BP.

XX ADO16519;
 XX 29-JUL-2004 (first entry)
 DT
 XX 4 synthesis-period of neuroblastoma related primer, SEQ ID 781.
 DE
 XX Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.
 KW
 XX Synthetic.
 XX
 OS WO2004039975-A1.
 PN
 XX 13-MAY-2004.
 PD
 XX 30-OCT-2003; 2003WO-JP013932.
 XX
 PF 30-OCT-2002; 2002JP-00316586.
 PR
 XX (HISM) HISAMITSU PHARM CO LTD.
 PA (CHIB-) CHIBA PREFECTURE.
 XX
 PI Nakagawara A, Ohira M;
 XX WPI; 2004-390323/36.
 DR
 XX Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma
 PT cells useful for prognosing and determining progress stage of
 PT neuroblastomas.
 PT
 XX Claim 8; SEQ ID NO 781; 455pp; Japanese.
 PS
 XX The present invention relates to human nucleic acid sequences (I;
 CC ADO15739-ADO15912) obtained from 4 synthesis-period (stage 4S) of
 CC neuroblastoma cell. (I) is useful for prognosing and determining the
 CC progress stage of 4 synthesis-period of neuroblastoma. The present
 CC sequence is a primer, used to illustrate the invention.
 XX
 SQ Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 1.3e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 903 TGGCTGTGGTGTCTAT 919
 DB 17 TGGCTGTGGTGTCCAT 1

RESULT 1595
 ADT64925/C
 ID ADT64925 standard; RNA; 19 BP.
 XX
 AC ADT64925;
 XX
 DT 13-JAN-2005 (first entry)
 DT
 XX SARS coronavirus siRNA lower sequence 177.
 DE
 XX
 KW SARS; severe acute respiratory syndrome; siRNA; short interfering RNA;
 KW ss; RNA interference; gene silencing; SARS virus infection;
 KW acute respiratory failure; viral pneumonia.
 XX
 OS SARS coronavirus.
 XX
 PN WO2004092383-A2.
 XX
 PD 28-OCT-2004.
 XX
 PF 13-APR-2004; 2004WO-US011320.
 XX
 PR 15-APR-2003; 2003US-0462874P.
 PR 30-APR-2003; 2003US-0042716P.


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XX PF 15-JUL-1999; 99JP-00201279.
XX PR 15-JUL-1999; 99JP-00201279.
XX PA (SAKA ) OTSUKA PHARM CO LTD.
XX DR WPI; 2001-303742/32.
XX TSAT7005 gene, encoding a polypeptide useful for the diagnosis and
PT treatment of diseases associated with its expression.
XX Example 1; Page 24; 25pp; Japanese.
XX
CC The present sequence represents a PCR primer which is used in an example
CC from the present invention for the isolation of human TSA7005 gene. The
CC human TSA7005 protein shares 32% homology with human and mouse Reg
CC proteins, and 34% homology with the rat Reg protein. TSA7005 has
CC pancreatic beta cell growth activity and hypoglycaemic activity. The
CC TSA7005 protein can be used for the diagnosis and treatment of diseases
CC associated with the gene and its expression product
XX
SQ Sequence 16 BP; 1 A; 0 C; 0 G; 14 T; 0 U; 1 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAA 2723
Dy 16 TAAAAAATAAAAAAAAAA 1
RESULT 1598
AA18388/c
ID AA18388 standard; DNA; 17 BP.
AC AA18388;
XX
DT 11-MAY-1999 (first entry)
DE RT-PCR primer of the invention SEQ ID 29.
XX
KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
OS Synthetic.
XX
XX JP11032765-A.
XX
PD 09-FEB-1999.
XX
PF 18-JUL-1997; 97JP-00208312.
XX
PR 18-JUL-1997; 97JP-00208312.
XX
PA (TAKI ) TAKARA SHUZO CO LTD.
XX
XX WPI; 1999-183822/16.
XX
XX Peptides having at least two new nucleotides - useful as primers in RT-
PT PCR.
XX
PS Example 1; Page 12; 19pp; Japanese.
XX
XX This sequence represents a primer of the invention. The invention relates
CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
CC natural number indicating the repetition of alpha; beta, delta = V or N;
CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
CC thymine; gamma = thymine; k = natural number of 3 or over indicating the
CC repetition of gamma, in which thymine expressed by gamma is composed of
CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are

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CC useful as primers for RT-PCR and determination of base sequences. The new
CC sequences allow for reproductive and highly efficient analysis of gene
CC sequences
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAA 2723
Dy 16 BAAAAAATAAAAAAAAAA 1
RESULT 1599
AA14174/c
ID AA14174 standard; DNA; 17 BP.
XX
AC AA14174;
XX
DT 18-DEC-2001 (first entry)
DE Modified Poly-T Primer #1 used in construction of probe sets.
XX
KW WRAP-Probe; gene expression array; global amplification; RNA array; ss;
KW tissue microarray; drug discovery assay; reporter binding site; forensic;
KW diagnostic; genomic analysis; universal linker; poly-T primer.
XX
OS Synthetic.
XX
XX WO200166802-A1.
XX
PD 13-SEP-2001.
XX
PF 09-MAR-2001; 2001WO-US007508.
XX
PR 09-MAR-2000; 2000US-0187982P.
XX
PA (GENE-) GENETAG TECHNOLOGY INC.
XX
PI Shafer DA;
XX
XX WPI; 2001-596845/67.
XX
XX Novel probe sets with common universal linkers at one or both ends (WRAP
PT probes) for gene expression arrays to provide global amplification of
PT probe set and to provide common equivalent signaling regardless of
PT length.
XX
PS Disclosure; Page 88; 97pp; English.
XX
XX The invention relates to a probe set for gene expression arrays to
CC provide common equivalent signalling per probe and global amplification
CC of the set. The probe set has a pool of modified cDNA probes, each probe
CC having a central target specific segment copied from a portion of a
CC single mRNA transcript and a universal linker (a WRAP-Probe) located on
CC one or both terminal ends. The universal linker has reporter binding
CC sites to join common reporters to the probes and primer binding sites to
CC copy and amplify the probe. The probes and reporters are useful in
CC diagnostic or drug discovery assays for a wide range of biomedical
CC samples, including detection of nucleic acids and gene expression
CC profiles in human diagnostics, forensics and genomic analysis. The
CC methods are useful for amplifying and identifying any unknown DNA
CC fragment and also for improving sensitivity with tissue microarrays or
CC RNA arrays. The methods improve the quantification of gene expression and
CC allow highly improved detection of rare transcripts or very small
CC samples. This sequence represents a poly-T primer used in the
CC construction of probe sets
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 17;

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Tue Nov 7 10:41:34 2006

Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2723
Db 16 BAAAAA 1

RESULT 1600
ADM11779/c
ID ADM11779 standard; DNA; 19 BP.
XX
AC ADM11779;
XX
DT 20-MAY-2004 (first entry)
XX
DE Environmental pollutant method-related oligo dt PCR primer.
XX
KW aromatic compound; gene expression alteration;
KW environmental pollutant analysis; ss; oligo dt; PCR; primer.
XX
OS Unidentified.
XX
PN JP2004049103-A.
XX
PD 19-FEB-2004.
XX
PF 19-JUL-2002; 2002JP-00210632.
XX
PR 19-JUL-2002; 2002JP-00210632.
XX
PA (WARI/) WARIISHI H.
PA (KUBI) KUBOTA CORP.
XX
WPI; 2004-232127/22.
XX
PT Novel genes of eukaryotic microorganism belonging to Phanerochaete genus,
PT and exhibiting change in expression of behavior in presence of aromatic
PT compound, is useful for analyzing environmental pollutant.
XX
PS Example 1; SEQ ID NO 9; 36pp; Japanese.
XX
CC The invention comprises genes from Phanerochaete chrysosporium which
CC exhibit a change in expression in the presence of an aromatic compound.
CC The Phanerochaete chrysosporium genes of the invention are useful for
CC analysing an environmental pollutant. The present DNA sequence represents
CC an oligo dt PCR primer that was used in an example of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 2 G; 15 T; 0 U; 2 Other;

Query Match 0.8%; Score 15.2; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.3e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2723
Db 18 BAAAAA 3

Search completed: November 7, 2006, 10:29:14
Job time : 82 secs